ORDER NO. VMD9501M109

Service Manual

General Description
Adjustment Procedures
Block / Schematic Diagrams
Exploded Views / Parts List

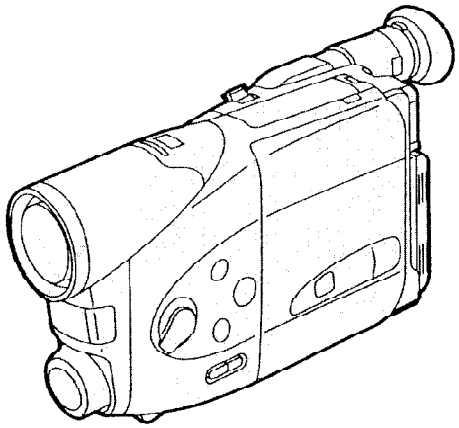
Panasonic VHS C
PAL

HQ

VHS-C Movie

NV-R11B/A

DL-MECHANISM



SPECIFICATIONS

ITEM	SPECIFICATION
POWER	Source: Battery Pack; 4.8 V DC AC Adaptor; 6.0 V DC Consumption; 5.4 W (Battery operation)
VIDEO RECORDING SYSTEM	4 rotary heads, helical scanning system PAL
TAPE FORMAT	VHS-C Cassette Tape (Tape width 12.7 mm)
TAPE SPEED	SP mode: 23.39 mm/s LP mode: 11.7 mm/s Record/Playback Time: SP: 45 min. with NV-EC45XG, NV-EC45SGXP LP: 90 min. with NV-EC45XG, NV-EC45SGXP
CAMERA	PICK-UP ELEMENT: CCD (Charge Coupled Device)
	STANDARD ILLUMINATION: 1,400 lux
	MINIMUM REQUIRED ILLUMINATION: 1 Lux (Low Light Mode)
	LENS: 10:1 Wide Variable Speed Power Zoom Lens with Digital AI Auto Focus, Auto Iris, Auto Focus System, F1.8 (3.9~39 mm), Filter Diameter 43 mm
	IMAGE SENSOR: 1/4 inch CCD Image Sensor
	VIEWFINDER: 0.5 inch Electronic Viewfinder

ITEM	SPECIFICATION
VIDEO	IIEADS: 4 rotary heads, 1 flying erase head
	OUTPUT: PHONO CONNECTOR; 1.0 Vp-p 75Ω unbalanced
AUDIO	HEAD: 1 Stationary head (Normal-Mono)
	OUTPUT: PHONO CONNECTOR; −6 dB, 47 kΩ loaded
WEIGHT	Approx. 720 g (without Battery Pack)
DIMENSIONS	89 (W) × 120 (H) × 255 (D) mm
STANDARD ACCESSORIES	1 pc. AC Adaptor 1 pc. Battery Pack 1 pc. Cassette Adaptor 1 pc. Shoulder Strap 1 pc. DC Input Cable 1 pc. Battery for Cassette Adaptor Operation 1 pc. AC Cable 1 pc. 21 Pin Adaptor (NV-R11B) 1 pc. AV Output Cable

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

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⚠ **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

INTRODUCTION 1

This Service manual contains techinical information which will allow service personneles to undrstand and service this model.
Section 1 pressents you with some general information of features and controls, enabling you to become familiar with each function.
Section 2 contributes to your electrical adjustment as well disassemble and replacement procedures.
Section 3 contain block diagram which offers you information for checking and undrstanding each circuit. Schematic diagrams which give you detailed information such as waveforms, vlotage data, function e. t. c...
Section 4 contain exploed views and parts list.

Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

Note 1: Adjustment Procedure for Mechanism-Chassis is separate volume from this model.
Please refer to following manunal for detail of adjustment procedure for Mechanism-Chassis.
Order number for adjustment procedure of Mechanism-Chassis : VMD9412M130

Note 2: Adjustment Procedure for Camera-unit is separate volume from this model.
Please refer to following manunal for detail of adjustment procedure for Camera.
Order number for adjustment procedure of Camera : VMD9501M103

Note 3: This Movie camera uses AC Adaptor is VSK0317C.
The Service Manual for AC Adaptor is VSK0317C is separate volume.
Please refer to following manual for detail of VSK0317C.
Order number for AC Adaptor is VSK0317C. : VMD9501M104.

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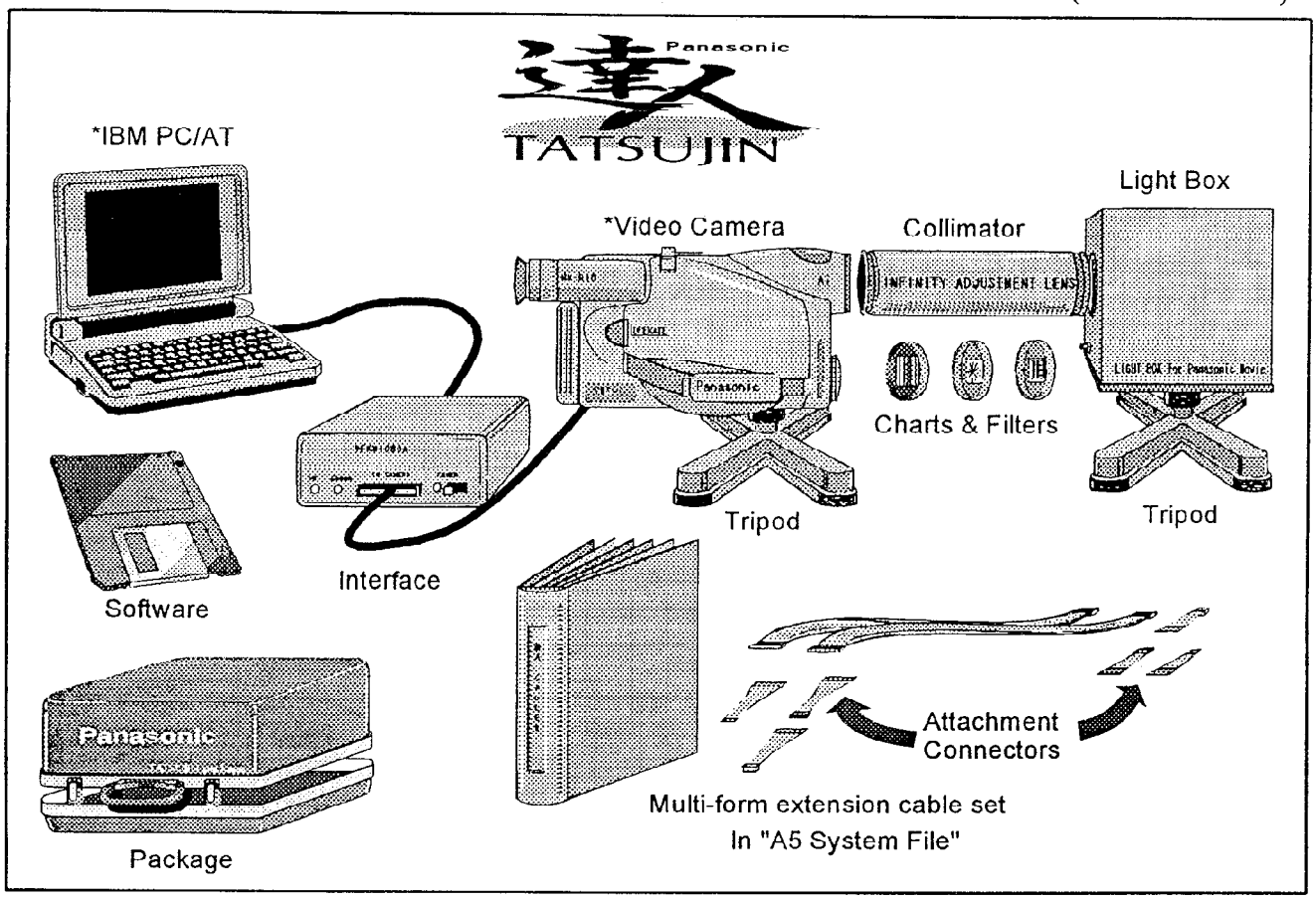
Technical Information

Subject: Introduction of new service device kit "TATSUJIN"(VED95TTJ).



A new service device kit for Video Camera, "TATSUJIN" Kit, is now avaiable from Panasonic.
"TATSUJIN" is a Japanese word whic means a specialist, expert, or master in English.
This naming was made because the kit will make you a"TATSUJIN" of Panasonic Video Camera servicing.
The "TSUJIN" itconsists ofthe following 3 items which arc simply organized in a small package.
All of which will drastically improve your productivity of Video Camera servicingin terms of Diagnosis, Adjustment, and Confirmation.

1. PC-EVR. (Interface, Software, Connecting Cables)

It connect a Camera to your IBM PC/AT so that the adjustment and trouble-shooting can be done easily on PC screen.
The time used to taken by the camera adjustment will be reduced more than 60%. In addition, Its diagnosis support function helps you to improve the sservice efficiency drastically.
The conventional EVR(VFK0644) will be replaced by this new computer-aided system.

Note: *PC and *Camera are not included in the kit. The minimum requirement of the PC is 80286 CPU, 1MB RAM, and MS-DOS 3.2. For further information, please contact Video Equipment Division.

2. Optical Set. (Collimator, Charts & Filters, Light Box, Tripods)

All of the opical devices which are indispensable to service a camera but used to take a hugg space to set up, are now drastically shrunk into a compact "Desk-top space"
Now you can easily aim various charts, COLOR-BAR, GRAY-SCALE, HUNTING, and WHITE, by simply attaching them to the collimator which is inserted in a compact light box.
So that you do not have to worry about restricting external light and measuring the distance from the chart.

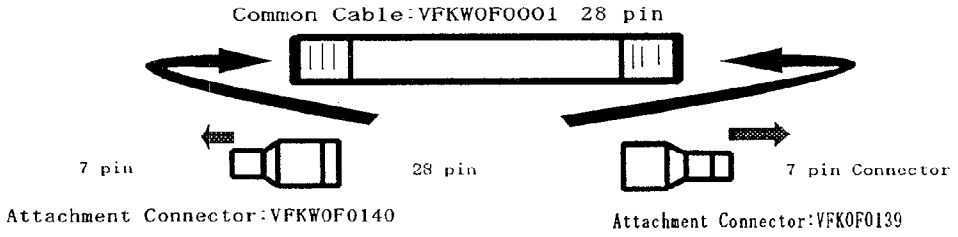
3. Multi-form Extension Cable Set.

Now you can make any kind of extension cable required, by simply changing the attachment connectors.
All of the connectors which cover all extension cables since 1990, are simply organized in a "A5 System file".
When you need a new connectot for a new model it can be purchased at extremely low price.

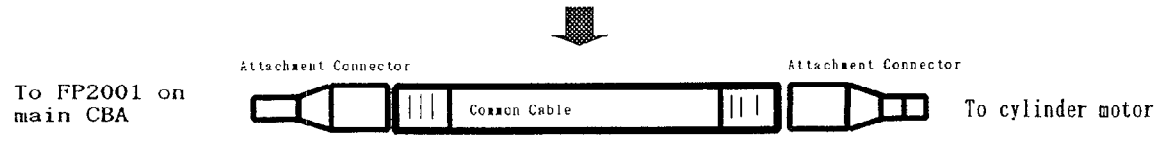
Note: Example for new type extension cables.

How to use the new type extension cables are as follows.
(This model requires new extension cables between FP2001 (Main) and CYLINDER.)

1. Attach the attachment connector (VFKW0F0139 & VFKW0F0140) to Common Cable(VFKW0F0001) as follows. Please check the direction of conductors between attachment connector and Common Cable.



2. Connect the attachment connector (VFKW0F0139) to the Cylinder Motor.
3. Connect the attachment connector (VFKW0F0140) to the FP2001 on Main C.B.A.



Service caution.

1-1. Service Extension Cables.

Use the following extension cables when checking or adjusting individual circuit bords.
From this model, the new style extension cables are used , these cables are included in Tatsujin-Kit.
New Style Extension Cables(Mylti form Extension cable)⟹ Ref-No 8~10.

Ref	Part No.	PIN	Part Name	Connection	Q'ty	Remaks
1	VFK0839	30	Extension Cable	B1001 (Main) ~ B1601(EVF)	1	
2	VFK0670	18	Flat Cable	FP6001(Main) ~ Mech. Chassis	1	
3	VFK0670	18	Flat Cable	FP2002(Main) ~ CAPSTAN MOTOR	1	
4	VFK0729	6	Flat Cable	FP6002(Main) ~ Mech. Chassis	1	or VFK0978
5	VFK0929	12	Flat Cable	B201 (SENSOR) ~ CCD	1	
6	VFK0913	18	Flat Cable	FP701 (Main) ~ LENS UNIT	1	
7	VFK0728	9	Flat Cable	FP4001(Main) ~ A/C HEAD	1	or VFK0980
8	VFKW0F0139	7	Attachment Connector	FP2001(Main) ~ CYLINDER	1	
9	VFKW0F0140	7	Attachment Connector		1	
10	VFKW0F0001	28	Common Cable		1	

How To Use extension cables.

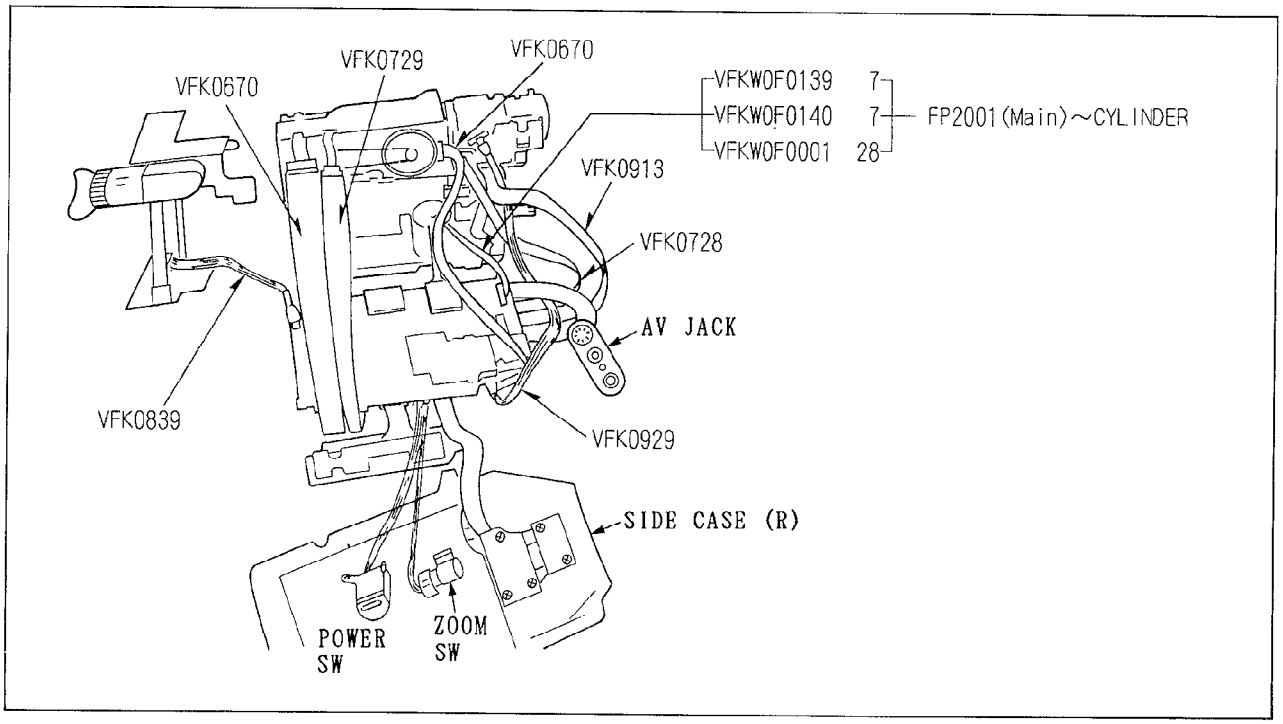


Fig. T1

Note:
For easy servicing, remove the 3 parts from the Side Case(L) as shown below.

1). Zoom SW..... (By removing 1 Screw)
2). Power SW..... (By removing 2 Screws)
3). AV-Jack..... (By removing 2 Screws)

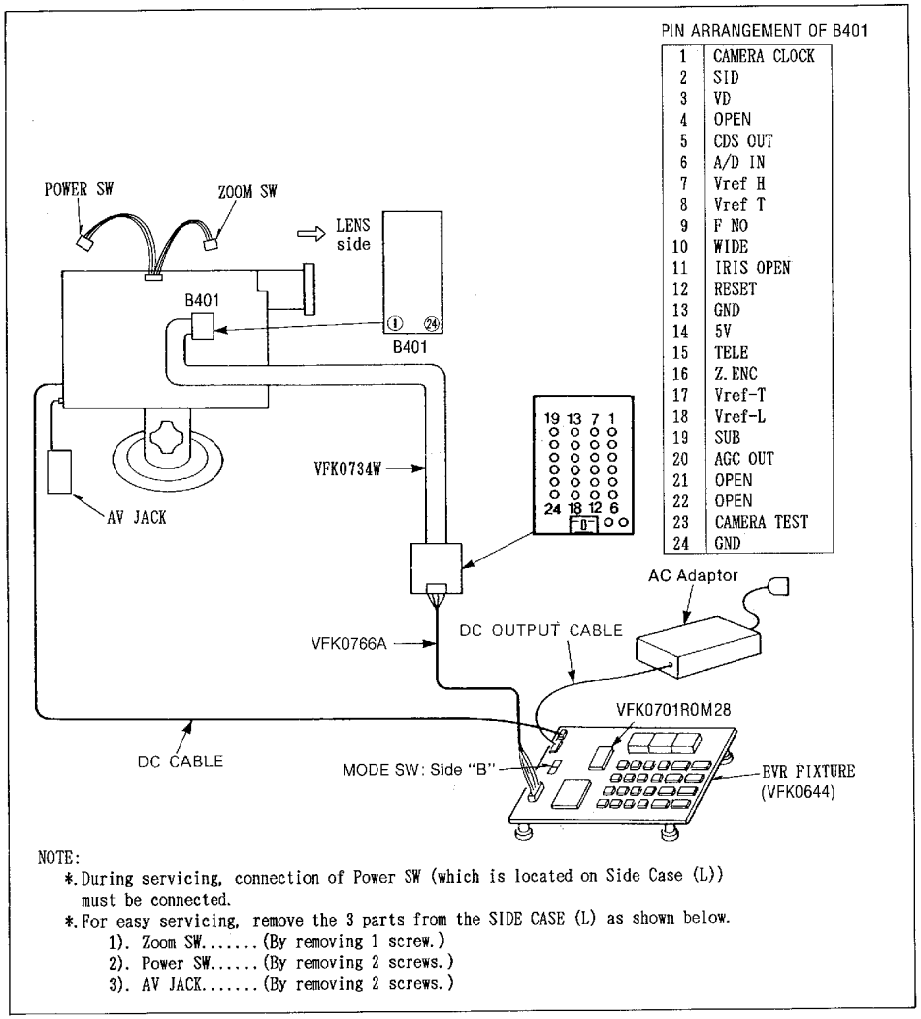
1-2. New ROM IC for EVR fixture.

We are pleased to introduse the new ROM IC, VFK0701ROM28 for the EVR fixture.
This ROM IC will provide you with many advarced features such as automatic calculation.

Connecting Cables for between EVR and Movie Camera are as same as provious models.

Number of Connecting Cables : VFK0734W & VFK0766A

Connection between this Movie Camera and EVR fixture are solderless when using the VFK0734W and VFK0766A. Please refer to Fig. T2 for how to use the cables.



NOTE:
*. During servicing, connection of Power SW (which is located on Side Case (L)) must be connected.
*. For easy servicing, remove the 3 parts from the SIDE CASE (L) as shown below.
1). Zoom SW.....(By removing 1 screw.)
2). Power SW.....(By removing 2 screws.)
3). AV JACK.....(By removing 2 screws.)

Fig.T2

ROM ICs for EVR fixture

There are 28 kinds of ROM IC's as shown in Fig.R1.
These all ROM ICs have 3 kinds of Functions as shown below.

(1). General Adjustment for Camera unit
(2). Automatic Calculation for AWB & Colour Reproduction
(3). Average Data Automatic rewriting

REF. No.	ROM NUMBER & available	Effective System	MODE SW SIDE	Applicable models & Function	PART NUMBER OF EVR CONNECTION CABLE
1	VFK0701ROM1 available	PAL & NTSC	"A" SIDE	NV-VS70/NV-M810	VFK0769
			"B" SIDE	NV-S1/NV-S1C0 (PAL & NTSC)	
2	VFK0701ROM2 available	PAL & NTSC	"B" SIDE	NV-S5/NV-S5C0 (PAL & NTSC)	VFK0730
3	VFK0701ROM3 available	PAL ONLY	"A" SIDE	NV-G1/G2/G3(G100/G200/G300)	VFK0699
			"B" SIDE	NV-MS95/MS95D	
4	VFK0701ROM4 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-S7/S9 (NTSC ONLY)	VFK0766A & VFK0734W
5	VFK0701ROM5 available	PAL ONLY	"A" SIDE	NV-S7/NV-S700	VFK0766A & VFK0734W
			"B" SIDE	NV-G101/G120/G202/G220/G303	VFK0699
6	VFK0701ROM6 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-T1(NTSC ONLY)	VFK0766A & VFK0734W
7	VFK0701ROM7	PAL ONLY	"A" SIDE	NV-M40/NV-M3000/NV-M3300	VFK0766A & VFK0734W
	Descontinued			(Please use VFK0701ROM10)	
8	VFK0701ROM8 available	PAL ONLY	"A" SIDE	NV-S6/NV-S600/NV-S8/S800	VFK0766A & VFK0734W
9	VFK0701ROM9 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-S99/S77	VFK0766A & VFK0734W
			"B" SIDE		
10	VFK0701ROM10 available	PAL ONLY	"A" SIDE	NV-MS4/NV-M9000/NV-M9900	VFK0766A & VFK0734W
			"B" SIDE	NV-M40/NV-M3000/NV-M3300	
11	VFK0701ROM11 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-G200PN	VFK0766A & VFK0734W
			"B" SIDE	NV-M3000PN/NV-M9000PN	
12	VFK0701ROM12 available	NTSC ONLY (JAPAN)	BITH SIDE ("A", "B")	NV-3CCD1 (NTSC JAPAN DOMESTIC)	VFK0766A & VFK0734W
13	VFK0701ROM13 available	PAL ONLY	"A" SIDE	NV-S20E	VFK0766A & VFK0734W
			"B" SIDE	NV-S20A/B/NV-S250	
14	VFK0701ROM14 available	PAL ONLY	"A" SIDE	NV-S78 (PAL ONLY)	VFK0766A & VFK0734W
15	VFK0701ROM15 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-CS1(NTSC ONLY)	VFK0766A & VFK0734W
16	VFK0701ROM16 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-S750PN	VFK0766A & VFK0734W
			"B" SIDE	NV-S250PN (NTSC ONLY)	
17	VFK0701ROM17 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-3CCD1PN	VFK0766A & VFK0734W
			"B" SIDE	NV-CS1	
18	VFK0701ROM18 available	PAL ONLY	"A" SIDE	NV-CS1(PAL ONLY)	VFK0766A & VFK0734W
19	VFK0701ROM19 available	PAL ONLY	"A" SIDE	NV-R50/NV-R500 (PAL ONLY)	VFK0766A & VFK0734W
20	VFK0701ROM20 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-R500PN	VFK0766A & VFK0734W
			"B" SIDE	NV-S10/S58	
21	VFK0701ROM21	PAL ONLY	"A" SIDE	NV-S85/S85C/S65	VFK0766A & VFK0734W
	Descontinued			(Please use VFK0701ROM22)	
22	VFK0701ROM22 available	PAL ONLY	"A" SIDE	NV-R10/R10C/A1	VFK0766A & VFK0734W
			"B" SIDE	NV-S85/S85D/S65	
23	VFK0701ROM23 available	PAL/NTSC	"A" SIDE	NV-R10F/R200/R30/R300	VFK0766A & VFK0734W
		SECAM	"B" SIDE	NV-R100PN/A1PN	
24	VFK0701ROM24 available	PAL	"A" SIDE	NV-S70	VFK0766A & VFK0734W
		NTSC	"B" SIDE	NV-R200PN/A1	
25	VFK0701ROM25 available	PAL	"A" SIDE	NV-S90/S900	VFK0766A & VFK0734W
26	VFK0701ROM26 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-LC1	VFK0766A & VFK0734W
27	VFK0701ROM27 available	NTSC ONLY (JAPAN)	"A" SIDE	NV-S100	VFK0766A & VFK0734W
			"B" SIDE	NV-X100	
28	VFK0701ROM28 available	PAL	"A" SIDE	NV-A3 SERIES	VFK0766A & VFK0734W
		PAL	"B" SIDE	NV-R11 SERIES	

Fig.R1

1-2. Auto Power Saver & Anti Grand-Shooting

①Genera Description

NV-R11A/B/E has AGS(Anti Grand-Shooting) function.

When not actually recording, aspecial function of the R11 saves battery power. If camera is turned downward by more than 75° after finishing the shooting of scence, it automatically switches from Recording Pause Mode to the Power Save Mode.

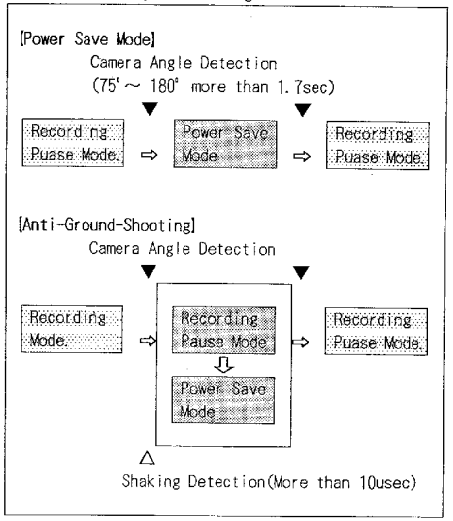
[Power Save Mode]

- Viewfinder ⇨ OFF
- Auto Focus Motor ⇨ OFF
- Zoom Motor ⇨ OFF

Save approx 1.0W of Power.

Anti-Ground-Shooting

When you start walking with camera pointed downward while it is still in the Recording Mode, or when you press the Start/Stop button by mistake while walking, the camera automatically switches over from the Recording Mode to Recording Pause Mode/Power Save mode (recording stop).
This saves valuable battery power and prevents wasted tape.
When the camera is then return to the horizontal position, it revert to the Recording Pause Mode, so you are reasdy to shoot again.



②Circuit Explanation

Fig. T3 is simple block diagram for AGS/APS.
Detail of Circuit operatin for AGS as follows.

1. When camera is turned downward by more than 75° from horizontal position durring recording, SW895(Angle Detector) turned on, IC6001-Pin 107 become High level.

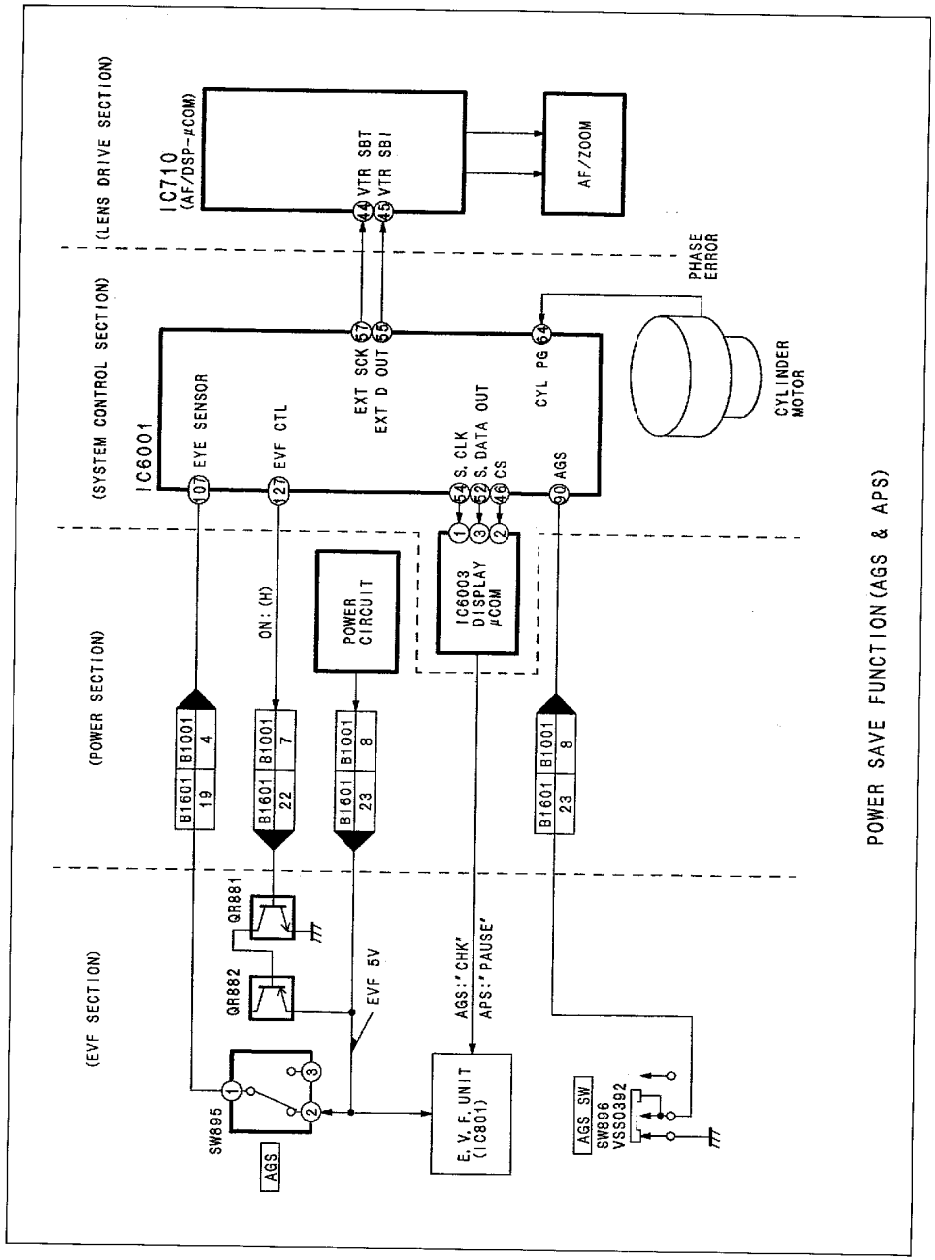
2. When IC6001-Pin 107 become High level (Angle Detector turn on), this information apply to IC710(AF Control IC) for control the AF/ZOOM motor.
SW895(Angle Detector) turned on durring Rec pause mode, AF/ZOOM motor will be stop.

In case of durring recording mode, AF/ZOOM Motor does not control.
But Mcehanism will go to rec-pause mode, when detect the Cylinder Phase shift with in SW895 turned on.

3. When IC6001-Pin 107 become High level, EVF control signal apply to QR881 from IC6001-Pin 127.
QR881 and QR882 turn on, then EVF +5V go to GND through QR882.
Fianly IC801 & CRT turn off.

[Condition of AGS]

Power-Source	VTR-Mode	VTR-CTL	EVF-CTL	CAMERA-CTL
Battery	Recording	YES	×	×
	Rec-Pause	×	YES	YES
	No tape	×	YES	YES
DC-JACK	Recording	YES	×	×
	Rec-Pause	×	YES	YES
	No tape	×	YES	YES

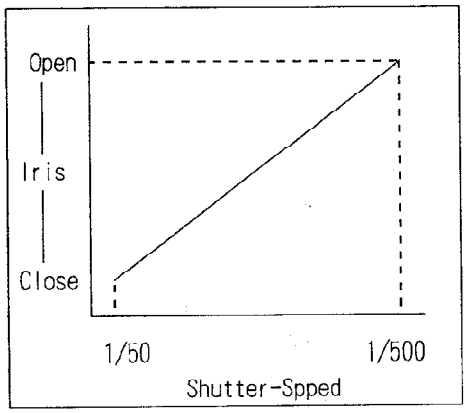


AE(Auto Exposure)

NV-R11A/B/E has three programme AE(Auto Exposure). mode Sports, Portrait and Low light.
AE modes, just select the required mode according to scene's.

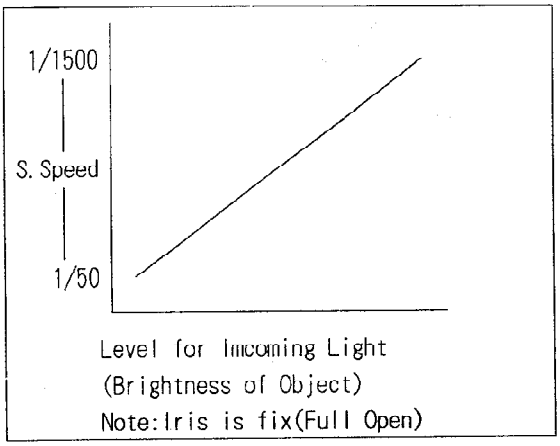
●Sport Mode.
(Shutter Speed have priority over Iris control)

Ideal for getting clear action shots.
When select the Sports Mode, The Shutter speed automatically adjusts between 1/50 and 1/500 of a second depending on the scene's brightness, to capture quick movements without blurring.
(Making the shutter speed as fast as possible)



●Portrait Mode
(Iris control have priority over Shutter Speed Control)

Use this to give portraits a special soft touch. The Iris adjusts to emphasize the subject while giving the background or foreground a soft, out focus effect.
(Opening the iris as much as possible acccording to lighting conditions.)



*. The purpose of the Programme AE which is the user could be shooting anytime anywhere.
To keep this, the Movie Camera must be adjusted the brightness of the picture depending on the lighting (illumination) condition.

AE MODE	OSD (IN EVF)	FOCUS/ WHITE B	SHUTTER SPEED	IRIS	GAIN CONTROL	How to keep the picture brightness? (Unique point)
AUTO	———	AUTO	FIXED 1/50	VARIABLE (ALC)	AGC	ALC & AGC
MANUAL	MNL	MANUAL	FIXED 1/50	VARIABLE (ALC)	AGC	ALC & AGC
SPORT		MANUAL	1/500 (1/500~1/50)	VARIABLE (ALC)	AGC	Keeps the S. SPD to 1/500sec. as much as possible(ALC/AGC)
PORTRAIT		MANUAL	VARIABLE 1/50~1/1500	FULLY OPEN (FIXED)	AGC (OFF)	Fully opens the iris as much as possible. (S. SPD/AGC)
LOW LIGHT		MANUAL	FIXED 1/50	VARIABLE (ALC)	AGC (NML G.+α)	AGC gains up (Adding normal AGC gain +α)
———	———	———	The brightness of the picture must be kept.			———

1. SHUTTER SPEED CONTROL

To achieve the "SPORTS" and "PORTRAIT" mode, the shutter speed must be controled depending on the picture brightness.

To control the shutter speed, the SUB signal is supplied from IC301(DSP) pin 89 to IC202-pin 10.

It is generated according to the picture brightness information which is supplied fromIC301(Y/C-DSP) by using the data line. The IC202 generats the sub pulse which is generated according to SUB signal, then it supplied to CCD image sensor from IC201 pin 1 after mixed up with SUB CONT(BIAS) whicis supplied from IC303(D/A CONV.) pin 15 to IC202 pin 1.

Thc sub cont signal is DC voltage to prevent the smiar or blooming , which is EEPROM's data achicvc the variou shutter speed, the AE CONT signal is changing graduall depens onthe picture brightness. (Gradually changing)

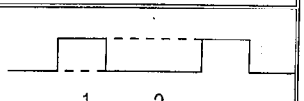
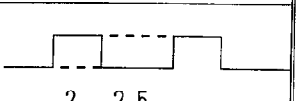
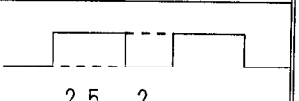
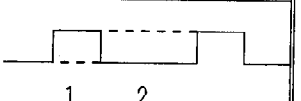
*. SPORTS mode:1/500(1/500 ⇨1/50(Normal))
*. PORTRAIT mode:1/50(1/50 ⇨1/1500)

*. Normally, So, the SUB OUT signal is just DC voltage.
*. The high period of the SUB signal and sub pulse emmiting period of the SUB OUT aresynchronizing.

SUB signal	SUB OUT	(Bias)
IC201-89	CCD-⑩	approx. 10V

2. ALC CONTROL

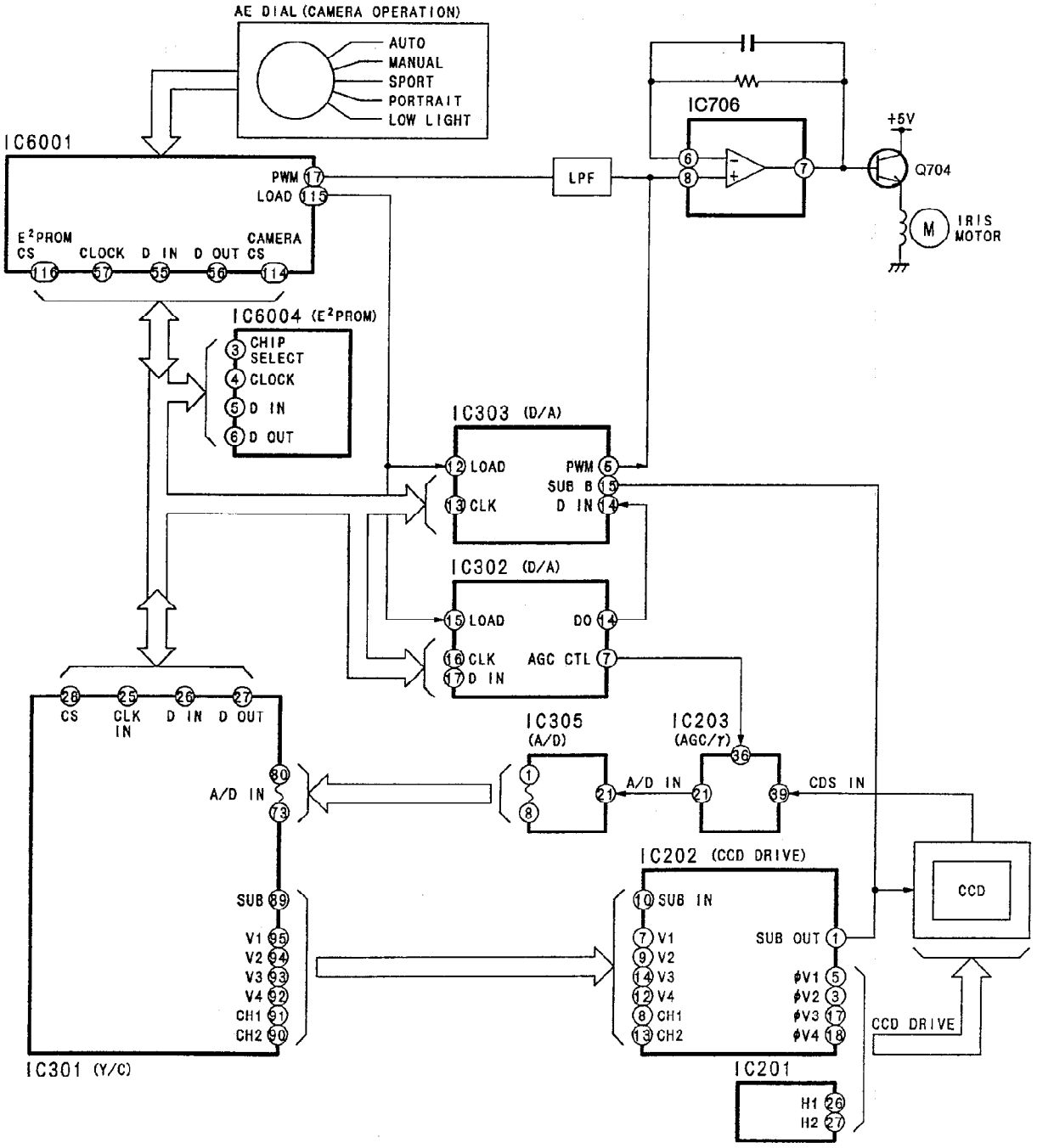
To control the picture brightness,
The IRIS is also controled.
Just for your reference, relationship between the Programme AE and the PWM output are as shown in Fig AE2. (Its object is the Light Box.)

Programme AE	WAVEFORM (IC6001-pin 17(PWM))
AUTO/ MANUAL	
SPORTS	
PORTRAIT	
LOW LIGHT	

NOTE :
The IRIS opening condition iscontrolled by the ratio of the PWM output. (IC6001-PIN 17) (When its high period is longer, the IRIS moves to more openning side.)*. To achieve the "PORTRAIT" mode, the IRIS must be set to its maximum opening which resultsIn a very small depth-of-field, In this case, high intensity lights is eaelly to come into the CCD image sensor. (To prevent this, the shutter speed is changing variably, up to 1/500sec.)

*. In the "Low Light" mode, the PWM output is same as "AUTO" and "MANUAL" becouse of the avoiding like "PORTRAIT" mode's picture.

BLOCK DIAGRAM FOR AUTO EXPOSE



The Built-in Lithium Battery

1. GENERAL DESCRIPTION

NV-R11 series have a built-in rechargeable lithium battery.
It maintains the operation of the built-in clock (Date and Time)when the Movie Camera is turned off. When the Movie Camera is in operation, this battery is recharged automatically. However, if the Movie Camera is not used for a very long time, the lithium battery can become exhausted. In this case, the Indication "⌧" in the Viewfinder flashes and the date and time return to the initial Indication " 1. 1.1990 ".

2. HOW TO RECHARGE THE BUILT-IN LITHIUM BATTERY

If the Indication "⌧" in the Viewfinder flashes for approx. 10 seconds when turning the Movie Camera on, the lithium battery needs to be recharged as follows:

(1) Connect the Movie Camera to the AC Adaptor.
(2). Turn out the [OPERATE] Switch. (Power on.)
(3). Slide the [EJECT] Switch.
(Even with no video cassette inserted, the Eject operation must be performed.)
and wait for approx. 4 hours.
(After the lithium battery has been charged for approx. 4 houres, it can maintain the operation of the clock for approx. 3 months.)

3. HOW TO REPLACE THE LITHIUM BATTERY

(PROCEDURES)

1 Remove the POWER C B A from Main Frame
(Remove the Gold 2 Screw from Main Frame.
2 Unsolder the Lithium battery "VL2320" and then replace the new one. (See Fig B1)

Fig. B1

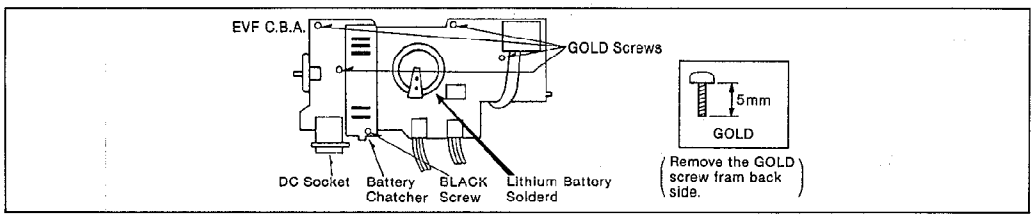


Fig. B1

NOTE :

The lithium battery is a critical component(Type No. :VL2320 Manufactured by Panasonic.)
It must never be subjected to excessive heat or discharge.
It must therefore only be fitted in equipment designed specifically for its use.
Replacement batteries must be of the same type and manufacturer.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpse.
It should be disposed of in waste products destined for burial rather than incineration.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacturer's instructions.

ADVARSEL!

Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

SERVICE INFORMATION DISPLAY

General Description

The NV-R11 series has SERVICE INFORMATION DISPLAY function which facilitates quick trouble shooting. You can turn on the Service Information Display, by performing the following procedures. This causes the Service Information to be displayed on the EVF. (There are 4 kinds of SERVICE MODE, as shown below.) In the OSD Line Output Mode, Service Information can also be viewd on the TV.

MODE NAME	FUNCTION	How to turn it ON. (Push following keys simultaneously for at least 2 sec.)		
OSD Line Output MODE	Checking the EVF information on the TV monitor.	DATE/TIME SET (TOP PANEL)	RESET (TOP PANEL)	DATE/TIME (SIDE PANEL)

MODE NAME	FUNCTION	How to turn it ON. (Push following keys simultaneously for at least 2 sec.)		
SERVICE MODE 1	Remaining Battery A/D Value Safety Device · Capstan/Cylinder injuctions	DATE/TIME SHIFT (TOP PANEL)	RESET (TOP PANEL)	DATE/TIME (SIDE PANEL)

MODE NAME	FUNCTION	How to turn it ON. (After chosing SERVICE MODE 1, Push [DATE/TIME] key. (SIDE PANEL)
SERVICE MODE 2	· Reference Voltage A/D Value Mechanism position Serial key code.	DATE TIME

MODE NAME	FUNCTION	How to turn it ON. (After chosing SERVICE MODE 2, Push [DATE/TIME] key. (SIDE PANEL)
SERVICE MODE 3	ERROR CODE Display	DATE TIME

MODE NAME	FUNCTION	How to turn it ON. (After chosing SERVICE MODE 3, Push [DATE/TIME] key. (SIDE PANEL)
SERVICE MODE 4	INDICATION FOR·PG SHIFTER VALUE	DATE TIME

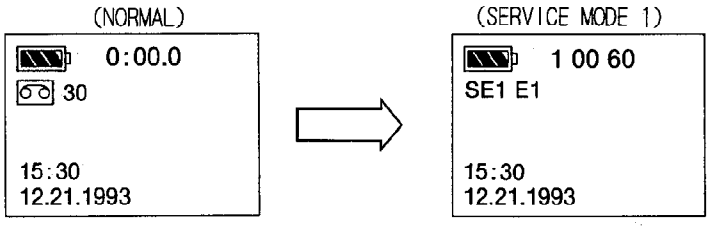
ERROR CODE DISPLAY

When undesirable conditions occur, the "ERROR CODE" will automatically be displayed on the EVF, the CAMERA LED will flash for a short time, then the power will be turned off
By turning on Service Mode 3 you can check to see what kind of undesirable condition occured, even after the ERROR CODE has disappeared. You can check the Error Code if the AC Main Lead or the Battery has been disconnected.
NV-R11 Series has the built in rechargeable Lithium Battery.
It maintain the operation of the built-in clock and error code for Service Mode when the Movie Camera turn off.
To clear the ERROR CODE, make shoot the IC6001 Pin 25 to GND for reset the IC6001.
Indication for Built in Clock return to intial condition when make shoot the IC6001 Pin 25 to GND.

SERVICE MODE 1

① Remaining Battery Voltage (A/D Value)=This Value shows the voltage at IC6001 Pin 99 which detects the battery under cut.

Desplay :
(Example)



For example ⇒S E 1 F O (Means you are in Service Mode 1 and the voltage at IC6001 Pin 98 is 3.58V.)

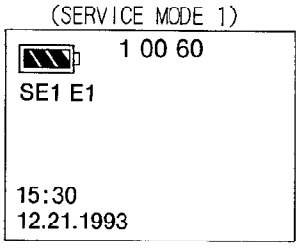
★ When the voltage at IC6001 pin98(the battery remaining voltage) and the voltage (approx. 3.35V) at IC6001 Pin 99(the reference voltage) became same level, battery under cut will be detected.

		Low Digit															
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
High Digit	0	0	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.22
	1	0.24	0.25	0.27	0.28	0.30	0.31	0.33	0.34	0.36	0.37	0.39	0.40	0.41	0.43	0.45	0.46
	2	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.61	0.63	0.64	0.66	0.67	0.69	0.70
	3	0 72	0.73	0 75	0 76	0.77	0.79	0.80	0.81	0.83	0.85	0.86	0.88	0.89	0.91	0.92	0.94
	4	0.95	0.97	0.98	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1 12	1 13	1 15	1 16	1 18
	5	1.19	1.21	1.22	1.24	1.25	1.27	1.28	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42
	6	1.43	1.45	1.46	1.48	1.49	1.50	1.52	1.53	1.55	1.56	1.58	1.59	1.61	1.62	1.64	1.65
	7	1.67	1.68	1.70	1.71	1.73	1.74	1.76	1.77	1.79	1.80	1.82	1.83	1.85	1.86	1.87	1.89
	8	1.91	1.92	1.94	1.95	1.97	1.98	2.00	2.01	2.03	2.04	2.06	2.07	2.09	2.10	2.12	2.13
	9	2 15	2 16	2 18	2 19	2.21	2 22	2.24	2.25	2.26	2.28	2.29	2.31	2.32	2.34	2.35	2.37
	A	2.38	2.40	2.41	2.43	2.44	2.46	2.47	2.49	2.50	2.52	2.53	2.55	2.56	2.58	2.60	2.61
	B	2.62	2.64	2.65	2.67	2.69	2.70	2.71	2.73	2.74	2.76	2.77	2.79	2.80	2.82	2.83	2.85
	C	2 86	2.88	2 89	2.91	2 92	2 94	2 95	2 97	2.98	2.99	3.01	3.02	3.04	3.05	3.07	3.08
	D	3.10	3.11	3.13	3.14	3 16	3.17	3.19	3 20	3.22	3.23	3.25	3.26	3.28	3.29	3.31	3.32
	E	3.34	3.35	3.37	3 38	3 40	3 41	3 43	3 44	3 46	3 47	3 49	3 50	3.52	3 53	3 55	3.56
	F	3.58	3 59	3 61	3 62	3 64	3.65	3.67	3 68	3.70	3.71	3.73	3.74	3.75	3.77	3.78	3.80

Remaining Battery Voltage (A/D value) (Voltage at IC6001 Pin 98)

② The condition of the tape, sefety device, capstan/cylinder information are shown in hexa decimal numbers.

Desplay:
(Example)



1 O O 6 O
*. TAPE END/BEGINNING DET. ⇒ NO CASSETTE
*. CASSETTE HOLDER(SW) DOWN CONDITION

Display position ⇒O. OO. OO (The position of linear time counter)
Part E (See Fig. E)
Part D (See Fig. D)
Part C (See Fig. C)
Part B (See Fig. B)
Part A (See Fig. A)

CONTENTS \ DISPLAY	0	1	2	3
CASSETTE SW (CASS. DOWN:1)	0	1	0	1
SAFETY TAB SW (TAB:1)	0	0	1	1
NOT USED(ALWAYS "0")	0	0	0	0
NOT USED(ALWAYS "1")	0	0	0	0

Fig. A

CONTENTS \ DISPLAY	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
LOADING LOCK (DET. :1)	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
CYLINDER LOCK (DET. :1)	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
T-REEL LOCK (DET. :1)	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
S-REEL LOCK (DET. :1)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

Fig. B

CONTENTS \ DISPLAY	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
UN-LOADING LOCK (DET. :1)	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
LOADING LOCK (DET. :1)	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
BATTERY UNDER CUT(DET:1)	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
DEW SENSOR (DET:1)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

Fig. C

CONTENTS \ DISPLAY	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
UN-LOADING COMMAND (OUTPUT:1)	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
TAPE END DETECTION (DET. :1)	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
TAPE BEGINNING DETECTION(DET. :1)	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
POSITION CHATARING (DET. :1)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

Fig. D

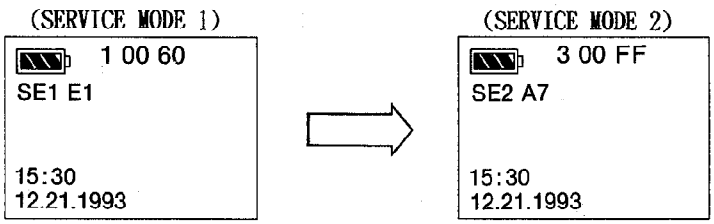
CONTENTS \ DISPLAY	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
CYLINDER ON (OUTPUT:1)	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
CAPSTAN ON (OUTPUT:1)	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
CAPSTAN REV (OUTPUT:1)	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
LOADING ON (OUTPUT:1)	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

Fig. E

SERVICE MODE 2

① Reference voltage A/D Value =This value shows the voltage at IC6001 Pin 99 which is used as a reference voltage to detect the battery under cut.

Desplay :
(Example)



For example ⇒S E 2 A7 (It shows Service Mode 2 and the voltage at IC6001 pin 99 is 2.49V.)

(unit:V)

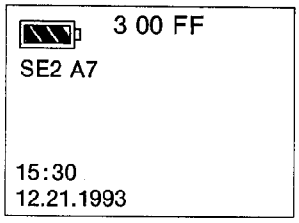
High Digit	Low Digit 0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.22
1	0 24	0 25	0 27	0 28	0 30	0 31	0 33	0 34	0 36	0.37	0.39	0.40	0.41	0.43	0.45	0.46
2	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.61	0.63	0.64	0.66	0.67	0.69	0.70
3	0.72	0.73	0.75	0.76	0.77	0.79	0.80	0.81	0.83	0.85	0.86	0.88	0.89	0.91	0.92	0.94
4	0.95	0.97	0.98	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.13	1.15	1.16	1.18
5	1 19	1.21	1 22	1 24	1 25	1 27	1 28	1.30	1.31	1.33	1.34	1.36	1.37	1.39	1.40	1.42
6	1.43	1.45	1.46	1.48	1.49	1.50	1.52	1.53	1.55	1.56	1.58	1.59	1.61	1.62	1.64	1.65
7	1.67	1.68	1.70	1.71	1.73	1.74	1.76	1.77	1.79	1.80	1.82	1.83	1.85	1.86	1.87	1.89
8	1.91	1.92	1.94	1.95	1.97	1.98	2.00	2.01	2.03	2.04	2.06	2.07	2.09	2.10	2.12	2.13
9	2 15	2 16	2 18	2 19	2 21	2 22	2 24	2.25	2 26	2 28	2 29	2.31	2 32	2 34	2 35	2.37
A	2 38	2 40	2 41	2 43	2 44	2 46	2 47	2.49	2 50	2 52	2 53	2 55	2 56	2.58	2 60	2 61
B	2.62	2.64	2.65	2.67	2.69	2.70	2.71	2.73	2.74	2.76	2.77	2.79	2.80	2.82	2.83	2.85
C	2 86	2 88	2 89	2 91	2 92	2 94	2 95	2 97	2 98	2 99	3 01	3.02	3 04	3 05	3 07	3 08
D	3.10	3.11	3.13	3.14	3.16	3.17	3.19	3.20	3.22	3.23	3.25	3.26	3.28	3.29	3.31	3.32
E	3.34	3.35	3.37	3.38	3.40	3.41	3.43	3.44	3.46	3.47	3.49	3.50	3.52	3.53	3.55	3 56
F	3.58	3.59	3.61	3.62	3.64	3.65	3.67	3.68	3.70	3.71	3.73	3.74	3.75	3 77	3.78	3 80

Reference Voltage (A/D value) (Voltage at IC6001 Pin 99)

② The contents of mechanism position, serial key code and mechanical process number are shown in hexa decimal number.

Desplay :
(Example)

(SERVICE MODE 2)



3 0 0 F F
*. NO OPERATION
*. STOP 1 MODE

Display position ⇒ 0 : 0 0 . 0 0 (The position of linear time counter)
Part H (See Fig. H)
Part G (See NOTE A)
Part F (See Fig. F)

DISPLAY	MECHANISM POSITION
1	E J E C T
2	P R E E J E C T
3	S T O P 1
4	P R E S T O P
5	(M I D)
6	
7	
8	S T O P 2
9	———
A	P L A Y

Fig. F (Mechanism Position)

DISPLAY	KEY CODE
0 0	S T O P
0 1	E J E C T
0 2	R E W
0 3	F F
0 6	P A U S E
C C	REC/REC PAUSE
0 A	P L A Y
F F	NO OPERATION

Fig. H (Key code)

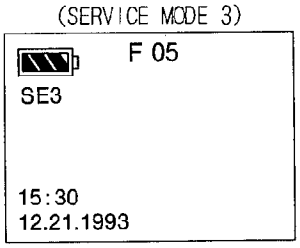
NOTE A:
This part shows mechanism movement process.
However it changes too fast to read it.
When servicing, use the Part F (Mechaism Position: See Fig. F) in stead of Part G.
in stead of Part G.

SERVICE MODE 3

① When undesirable conditions occured, you camn see what kind of error occured by turning on the Service Mode 3. (The error code is displayed on E V.F again, even power is turned power off. using the Lithum battery.
When you turn on Service Mode 3 the Error Code is displayed on the E. V. F. Also, the CAMERA LED is flashed according to Error code.

Desplay : (Example)

(SERVICE MODE 3)



F 05
*. Detected the Cylinder lock

Display position ⇒ O : O O . O O (The position of linear time counter)
(See Fig. I)
Blank (no display)
01~05, 10~11
F or U

Display position⇒CAMERA LED (See Fig. J)

DISPLAY	CONDITION	The Power off timing
F 0 1	T-REEL LOCK	After 1 minute flashing the LED
F 0 2	S-REEL LOCK	
F 0 3	UNLOADING LOCK	
F 0 4	LOADING LOCK	
F 0 5	CYLINDER LOCK	
F 5 1	FOCUS MOTOR LOCK	----------
F 5 2	ZOOM MOTOR LOCK	----------
U 1 0	DEW DETECTION	After 15 seconds flashing the LED
U 1 1	HEAD CLOGGING	Not turning off

Figure I Error Code

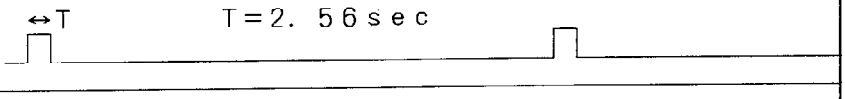
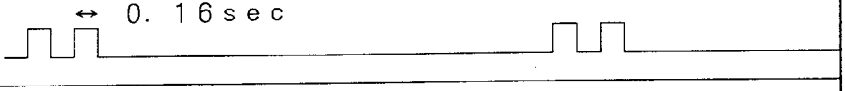
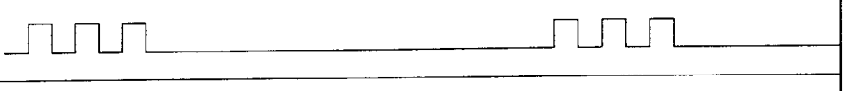
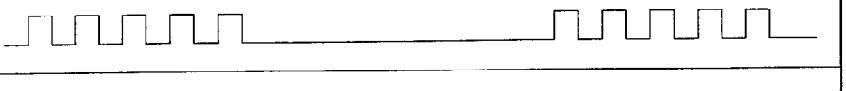
Lock Condition	Power LED Flashing Timming
T-REEL LOCK	
S-REEL LOCK	
UNLOADING LOCK	
LOADING LOCK	
CYLINDER LOCK	
OTHERS (U10 & U11)	Power LED is flashed at 1 Hz timing

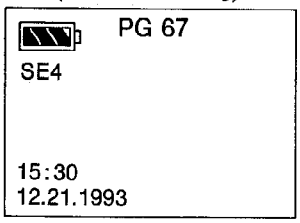
Fig. J LED Flashing Timing

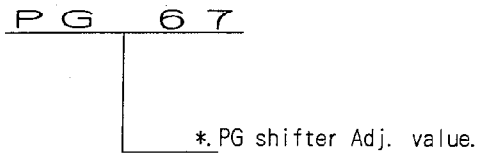
SERVICE MODE 4

Service Mode 4 is PG SHIFTER VALUE INDICATION mode for Servo section.
For more detail, please refer to Adjustment Service Manual Order No. VMD9501M103.

Desplay:
(Example)

(SERVICE MODE 3)





3. How to Check Digital Circuit

3-1. Checking Principle

The digital circuit can be checked if a ramp signal(Sawtooth signal) is supplied to the input of A/D Converter(IC305-21 or B401-6)).

The output of A/D Converter is described below.
In addtion to the A/D Converter IC305 output, all digital ICs input and output signals becomes specified pulses, which are listed in schematic diagram.

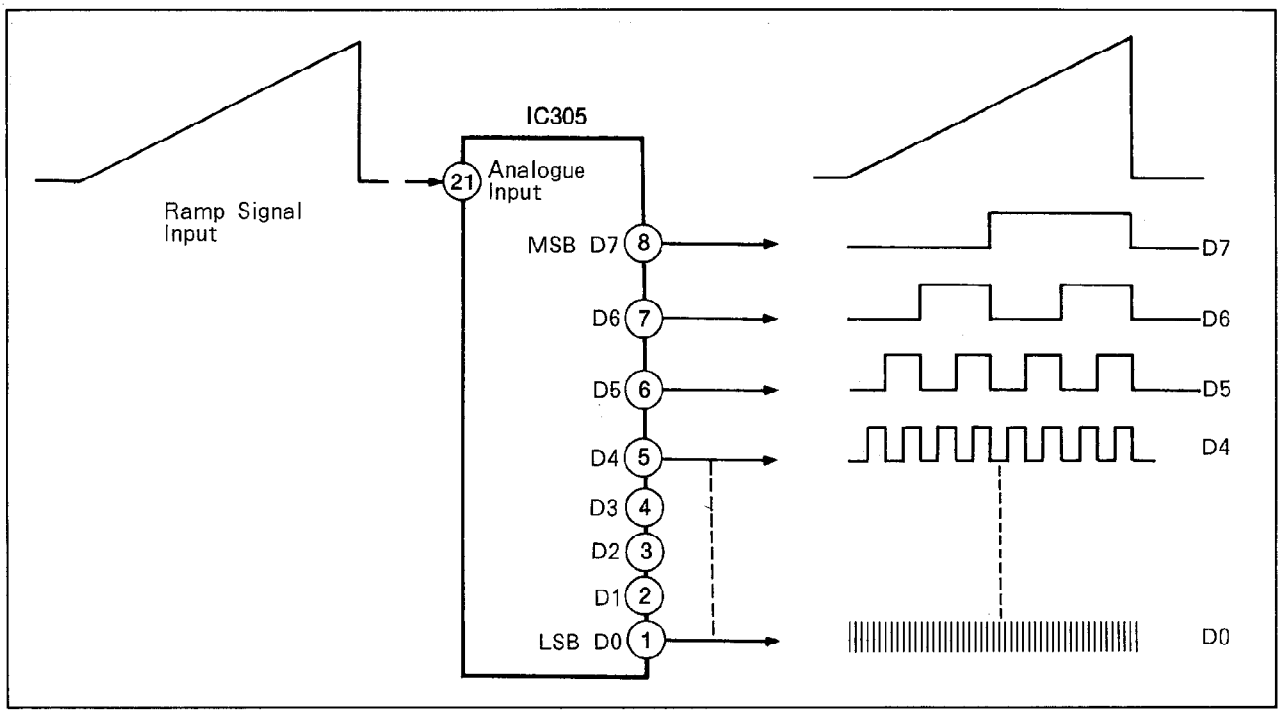
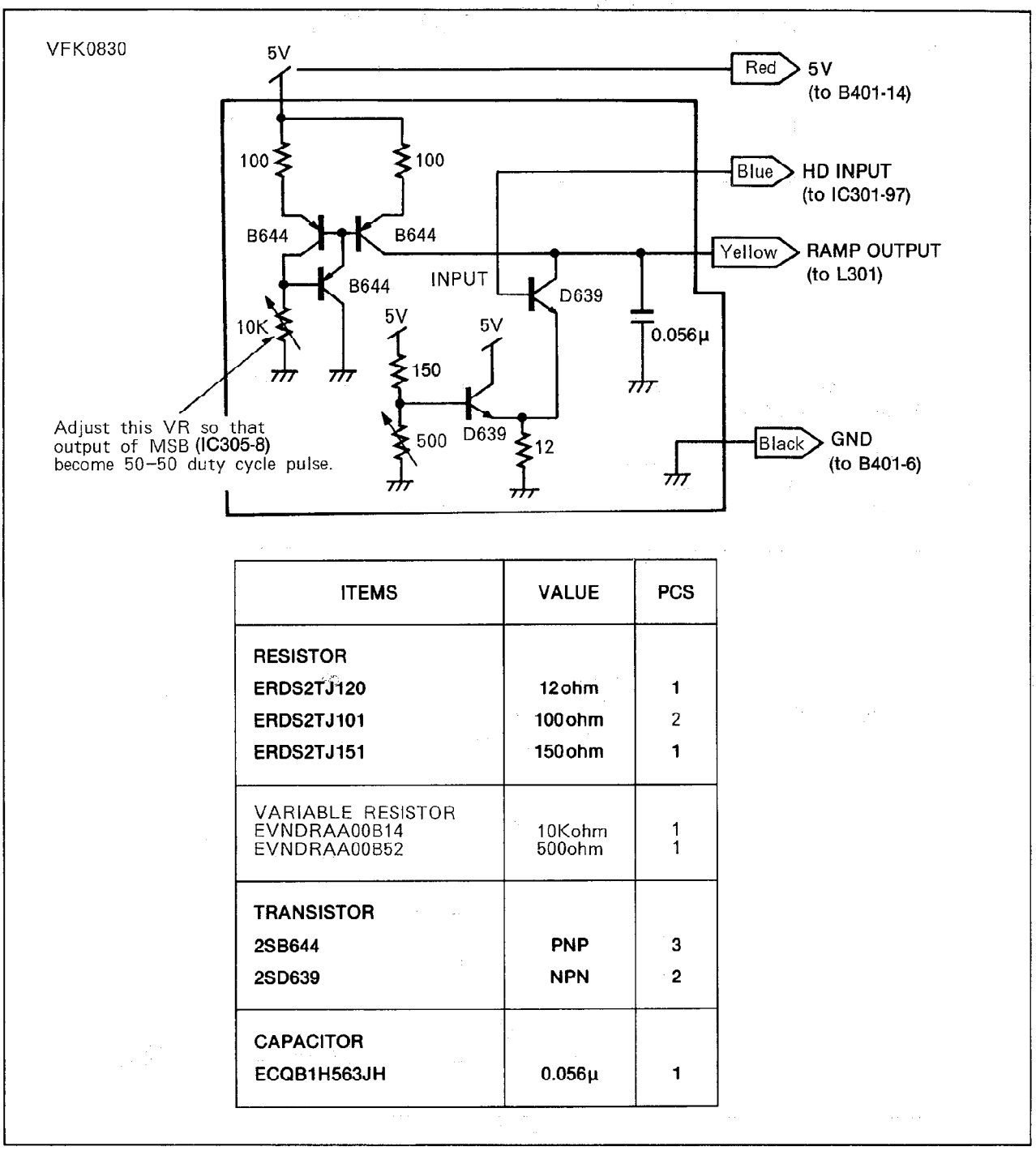


Fig. L1

3-2. How to Connect ramp generator.

In order to generate a ramp signal that synchronize with the HD signal(Horizontal Drive) of the camera, the following ramp generator circuit has been designed.
Construct and connect it to process borad as shown in Fig. L2, L3.



ITEMS	VALUE	PCS
RESISTOR		
ERDS2TJ120	**12ohm**	**1**
ERDS2TJ101	**100ohm**	2
ERDS2TJ151	**150ohm**	**1**
VARIABLE RESISTOR		
EVNDRAA00B14	10Kohm	1
EVNDRAA00B52	500ohm	1
TRANSISTOR		
2SB644	**PNP**	**3**
2SD639	**NPN**	**2**
CAPACITOR		
ECQB1H563JH	**0.056µ**	**1**

Fig. L2

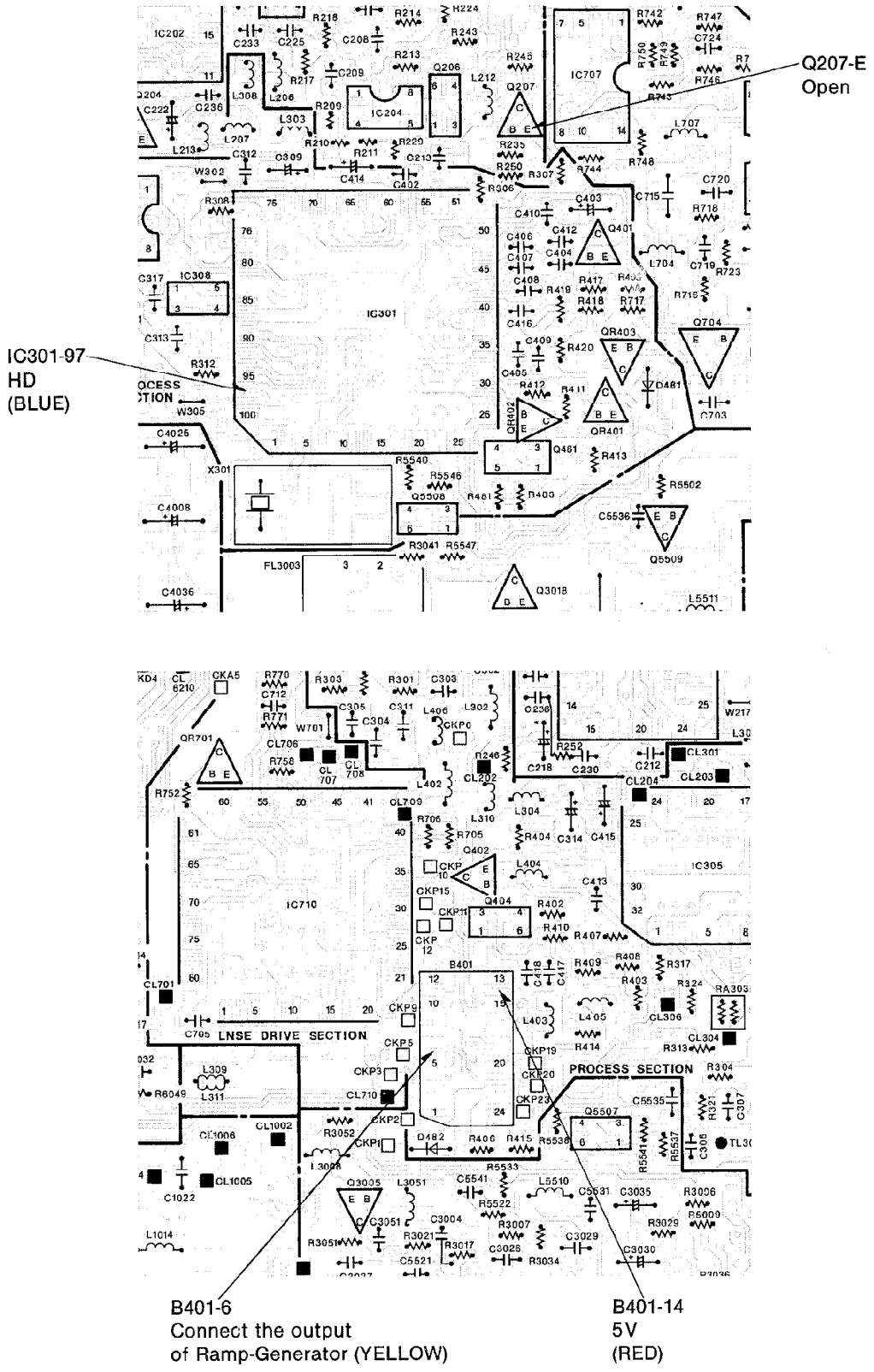
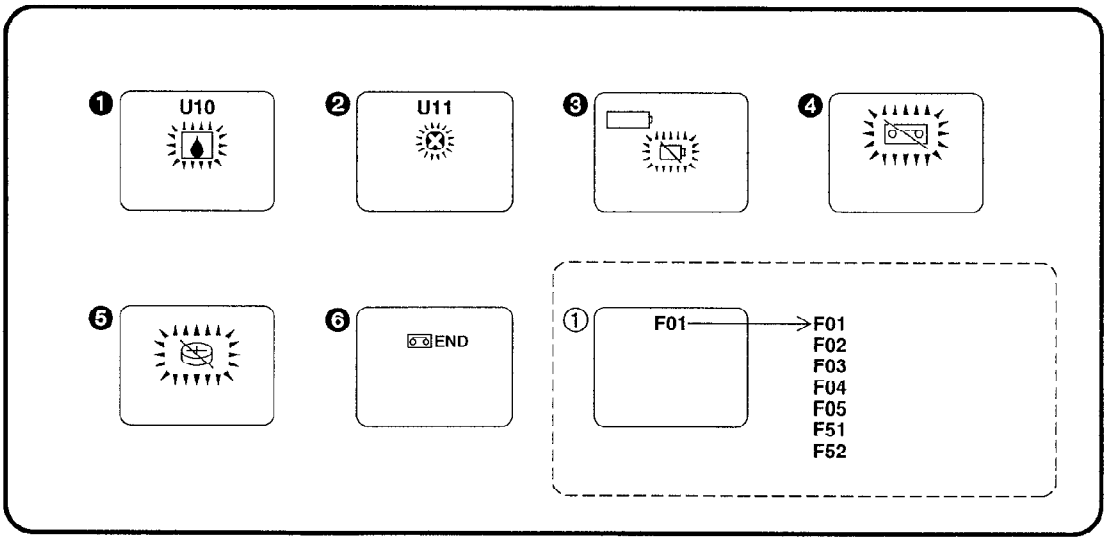

Q207-E
Open
IC301-97
HD
(BLUE)
B401-6
Connect the output
of Ramp-Generator (YELLOW)
B401-14
5V
(RED)
PROCESS SECTION

Fig. L3

SECTION 1
GENERAL DESCRIPTIONS



Indications in the Viewfinder

■ Warning/Alarm Indications

❶ Condensation

❷ Video Head Clogging

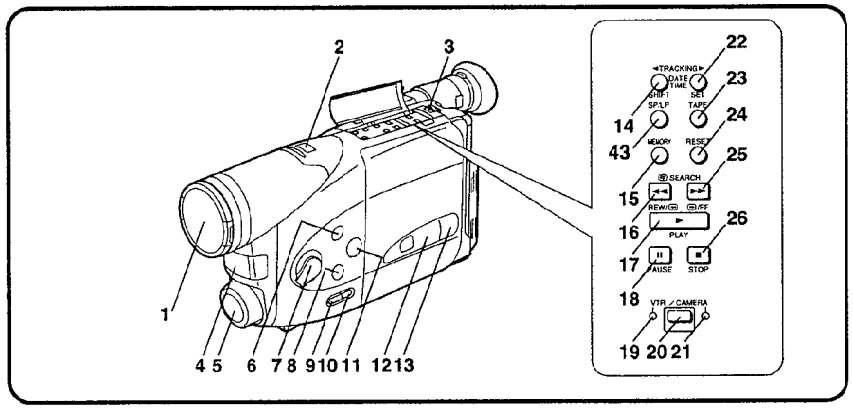
❸ Remaining Battery Power
When the last segment of this indication has disappeared, the "CAMERA" Indication Lamp flashes for a few seconds, and then the Movie Camera automatically switches off. Replace the Battery Pack with a fully charged one.

❹ Tape
When no video cassette is inserted, or when the tab of the inserted video cassette is broken out, this indication flashes. Insert a video cassette with intact tab.

❺ Built-in Lithium Battery
The built-in Lithium Battery is exhausted; charge it.

❻ End of the Tape
When the tape has reached its end, this indication lights. Insert a new Video Cassette.

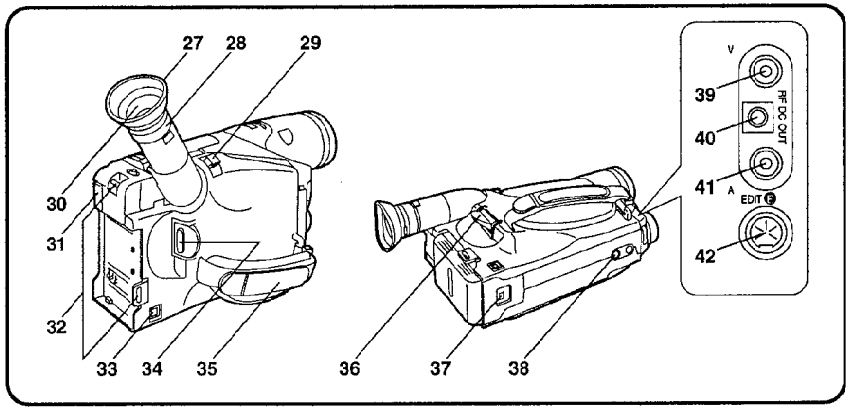
① Error Code
(Error codes are for service personnel information.)
If the "F" Indication appears in the Viewfinder, some malfunction has occurred. If the indicated error code is between "F01" and "F05", the Movie Camera will turn itself off automatically one minute after the "CAMERA" Lamp has started to flash. (If the indication is "F51" or "F52", the Movie Camera will not turn off automatically.)
In this case, write down the error code and tell it to the service personnel.
F01: Locked Take Up-Reel
F02: Locked Supply-Reel
F03: Locked Unloading Mechanism
F04: Locked Loading Mechanism
F05: Locked Cylinder
F51: Locked Focus Motor
F52: Locked Zoom Motor

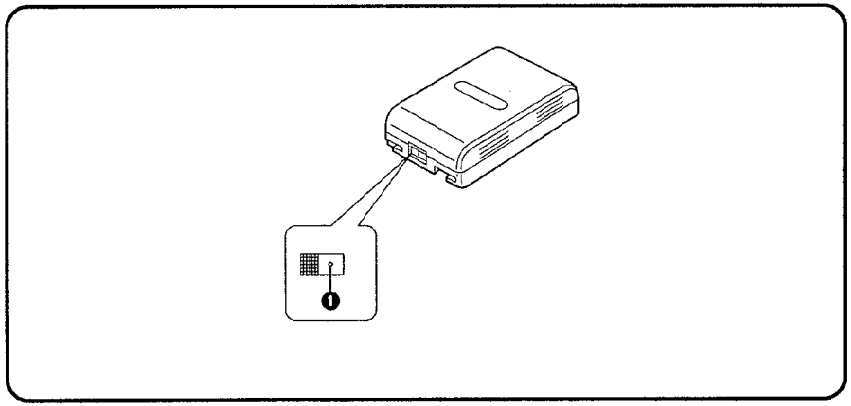


Controls and Components

1 Lens Cap
2 White Balance Sensor
3 [▲ EJECT] Lever
4 Microphone
5 Focus Ring
6 [BACKLIGHT] Button
7 [AE] Selector
8 [DATE/TIME] Button
9 [FOCUS] Button
10 [W.B] Button
11 [FADE] Button
12 Cassette Compartment Cover
13 Cassette Compartment [LOCK] Button
14 [DATE/TIME/SHIFT • ◄ TRACKING] Button
15 [MEMORY] Button
16 [◄◄] Button
17 [►] Button
18 [❚❚] Button
19 "VTR" Indication Lamp
20 [VTR/CAMERA] Button
21 "CAMERA" Indication Lamp
22 [DATE/TIME/SET • TRACKING ►] Button
23 [TAPE] Button
24 [RESET] Button
25 [►►] Button
26 [■] Button
43 [SP/LP] Button

27 Eyecup
28 Eyepiece Corrector Ring
29 [W • T] Zoom Lever
30 Viewfinder
31 [BATTERY EJECT] Button
32 Shoulder Strap Holders
33 [DC IN] Socket
34 Start/Stop Button
35 Grip Belt
36 [POWER] Switch
37 [POWER SAVE] Switch
38 Tripod Receptacle
39 [VIDEO OUT] Socket
40 [RF DC OUT] Socket
41 [AUDIO OUT] Socket
42 [EDIT] Socket





■ Charging Time and Maximum Time for Continuous Shooting and Manual Operation

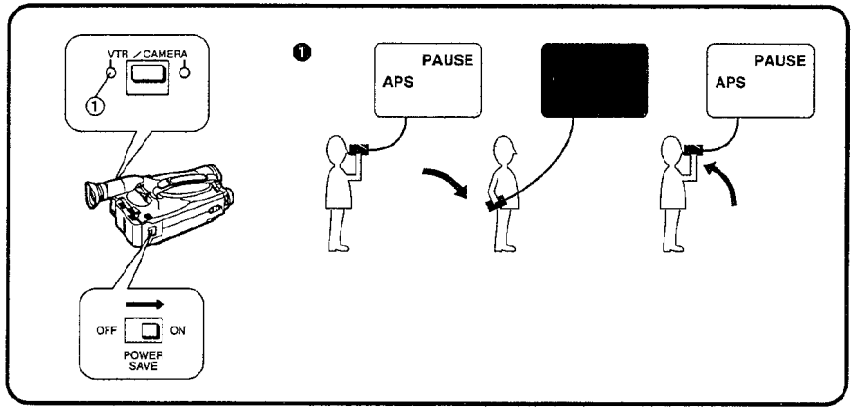
Battery Pack No.	Charging Time	Max. Continuous Shooting Time
Supplied	Approx. 60 min.	Approx. 60 min.
VW-VBS10E	Approx. 65 min.	Approx. 65 min.
VW-VBS20E	Approx. 130 min.	Approx. 130 min.
VW-VBH10E	Approx. 60 min.	Approx. 75 min.
VW-VBH20E	Approx. 160 min.	Approx. 150 min.

Notes:
- The use of the zoom and other functions increases the power consumption, so that the actual recording time per Battery Pack may actually be 30%–50% less than the max. continuous shooting time listed above.
- Do not dispose of the exhausted Battery Pack with your household waste. When purchasing a new Battery Pack, return the old Battery Pack to your dealer for environmentally correct disposal.

How to charge a Battery Pack if its operation time has become too short for practical use, or if it has been stored for a long time:
Continue charging for 24 hours even after the Charging Indication Lamp on the AC Adaptor goes out.
(If this does not result in an operation time sufficient for practical use, the service life of this Battery Pack has reached its end. Replace it with a new one.)

■ How to Use the Charge Confirmation Marker

Use this marker to distinguish between charged and discharged Battery Packs.
For example, slide the knob so that the dot ❶ is visible after the charging is completed.



4 How to Use the POWER SAVE Switch

If you set the [POWER SAVE] Switch to "ON", the "APS" Indication is displayed in the Viewfinder, and the Auto Power Save Function and the Anti-Ground-Shooting Function prevent you from wasting battery power and from the accidentally shooting the ground when you forget to stop shooting.
When you don't want to use these functions, set the [POWER SAVE] Switch to "OFF".

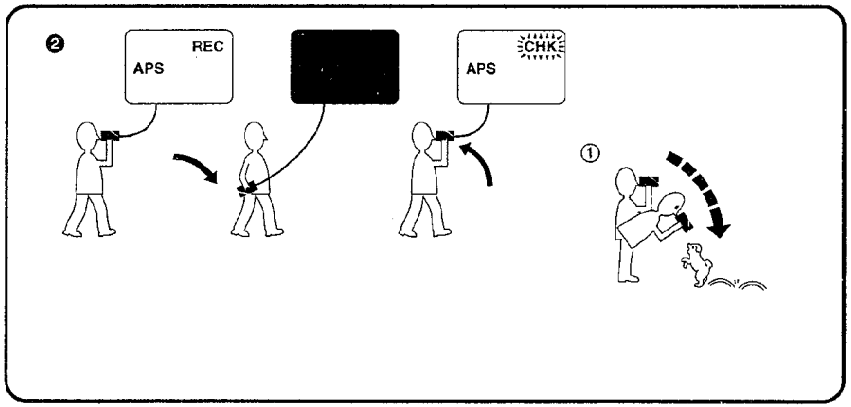
When changing locations between scenes or when not planning to shoot for a longer period of time, it is recommended to turn off the Movie Camera with the [POWER] Switch.

❶ Auto Power Save Function
(in the Shooting Pause Mode)
- The Battery Pack can be used longer for shooting.
- The Movie Camera automatically prevents shooting even when the Start/Stop Button is pressed accidentally.

When you tilt the Movie Camera downwards by more than about 70° from the normal horizontal shooting position for more than a few seconds, the Viewfinder turns off and the "VTR" Indication Lamp ① flashes.

■ To Resume Shooting
When you return the Movie Camera to an approximately horizontal position, the Movie Camera is again in the Shooting Pause Mode and you can restart shooting by pressing the Start/Stop Button.

Notes:
- When the Auto Power Save Function becomes activated, the Auto Focus and the Zoom Motor do not work.
- When you restart the shooting after this function was activated, the Auto White Balance Adjustment may not be precise for the first few seconds.

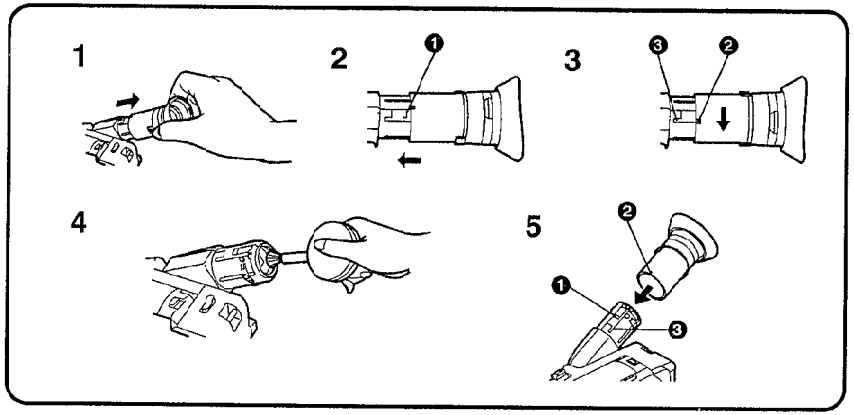


❷ Anti-Ground-Shooting Function
(in the Shooting Mode)
- The Battery Pack can be used longer for shooting.
- The Movie Camera automatically switches over to the Shooting Pause Mode to stop the unintentional shooting when you forget to press the Start/Stop Button at the end of a scene.

When you tilt the Movie Camera downwards by more than about 70° from the normal horizontal shooting position for more than a few seconds, and:
1) walk with the Movie Camera held in the hand or;
2) tilt the Movie Camera quickly downwards when not walking;
the Viewfinder turns off and the "VTR" Indication Lamp flashes.

■ To Resume Shooting
When you return the Movie Camera to an approximately horizontal position, the "CHK" (=check) Indication flashes in the Viewfinder. Since the shooting may have continued for several seconds, rewind the tape a little using the Camera Search Function to locate the exact end of the last desired scene, and then start shooting again.

Notes:
- The Anti-Ground Shooting Function is designed so that it does not become activated when you tilt the Movie Camera slowly downwards during shooting, as shown above ①.
- This function is not intended to replace the manual stopping of shooting.
- When this function becomes activated, the Auto Focus and the Zoom Motor do not work.
- When you restart shooting after this function became activated, the Auto White Balance Adjustment may not be precise for the first few seconds.



Cleaning

1 How to Clean the Viewfinder

1 Grasp the projections on either side of the Viewfinder and fully extend it.

2 Push the Viewfinder back approx. 3 mm so that its front edge is precisely aligned with the notch ❶.

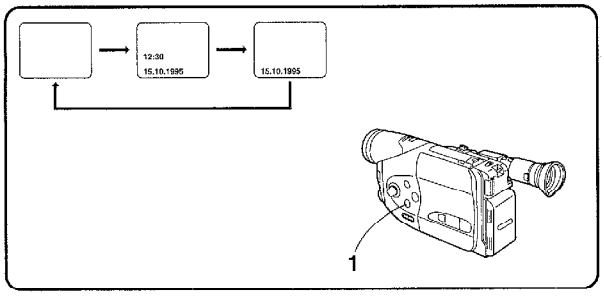
3 Turn the Viewfinder counterclockwise so that the mark ❷ is aligned with the line ❸ and pull it off.
- While turning it, some increased resistance can be felt; however, be sure to turn it to the line ❸.

4 Remove dust with a blower brush.

5 To re-attach the Viewfinder, align the mark ❷ with the line ❸, slip the Viewfinder on as far as the notch ❶ and turn it clockwise.

2 How to Clean the Movie Camera

Notes:
1. Do not use benzine, thinner or other chemicals for cleaning, because they could change the colour and damage the surface of the camera body.
2. When using a chemically treated cloth for cleaning, carefully follow the instructions for its use.
   - Wipe the Movie Camera with a clean, dry cloth. Never use cleaning fluid or other chemicals.
   - Clean the lens only with a blower brush (used for photo cameras) or special lens cleaning tissue (used for glasses and cameras).



■ **If you Make a Mistake during Setting, Restart from Step 3.**

■ **Changing the Figures of the Date/Time Indication**

By pressing the [SET] Button repeatedly, the Date/Time Indication can be changed in the following order:

Year: 1990→1991→ ..... →2089→1990→...
Month: 1→2→ ..... →12→1→...
Day: 1→2→ ..... →31→1→...
Hour: 0→1→ ..... →23→0→...
Minute: 00→01→ ..... →59→00→...

2 Inserting and Deleting the Date and Time

You can insert (and delete) the Date and Time Indications during shooting and when in the Shooting Pause Mode.

1 Press the [DATE/TIME] Button.

- By pressing this button repeatedly, you can change the Date/Time Indication in the Viewfinder in the following order. Select the desired indication.

12:30
→No indication→15.10.1995→15.10.1995 ·····
Date and Time Date only

3 The Built-in Lithium Battery

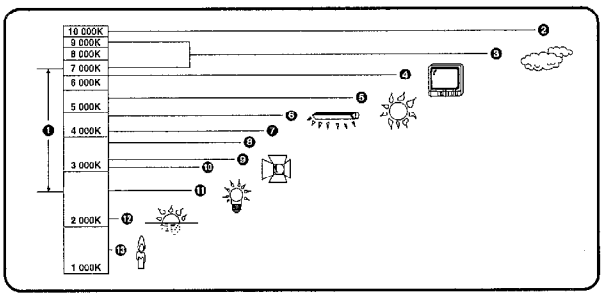
A built-in rechargeable lithium battery maintains the operation of the built-in clock when the Movie Camera is turned off. When the Movie Camera is in operation, this battery is charged automatically.
However, if the Movie Camera is not used for a very long time, the lithium battery can become exhausted. In this case, the "🔋" indication in the Viewfinder flashes and the date returns to the initial indication "1.1.1990".

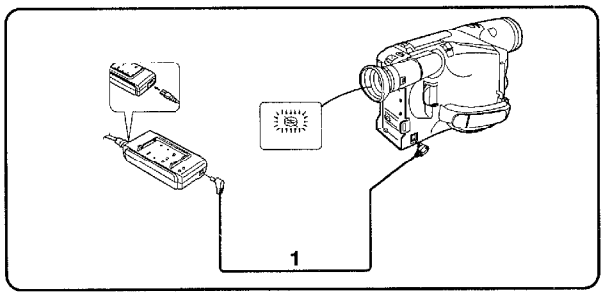
■ **How to Charge the Built-in Lithium Battery**

If the "🔋" indication in the Viewfinder flashes for approx. 10 seconds when you turn the Movie Camera on, the lithium battery is exhausted and must be charged as explained below.

1 Connect the Movie Camera to the AC Adaptor.

- After the lithium battery has been charged for approx. 8 hours, it can maintain the operation of the clock for approx. 3 months.
- After charging the lithium battery, the "🔋" indication still flashes to remind you to set the date and time as explained.

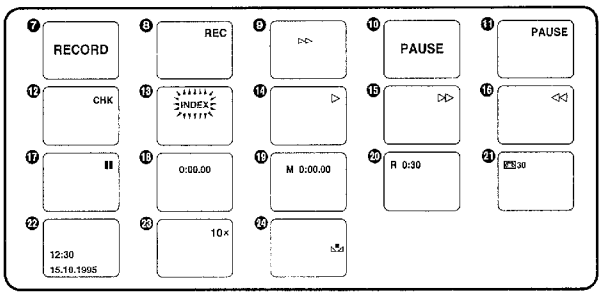




Colour Temperature and White Balance

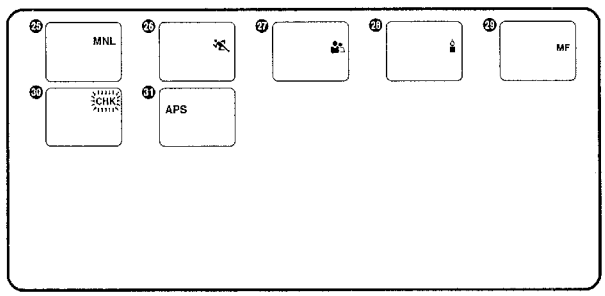
The colour temperature of the light source is measured in Kelvin (K). The higher the Kelvin value is, the more bluish is the light; the lower the value, the more reddish is the light. This is not directly related to the brightness. The table shows the relationship between natural light, artificial light and colour temperature.

❶ Control range of the Auto White Balance Function
❷ Blue sky
❸ Cloudy sky (rain)
❹ TV screen
❺ Sunlight
❻ White fluorescent lamp
❼ 2 hours after sunrise or before sunset
❽ 1 hour after sunrise or before sunset
❾ Halogen light bulb
❿ 30 minutes after sunrise or before sunset
⓫ Incandescent light bulb
⓬ Sunrise or sunset
⓭ Candlelight

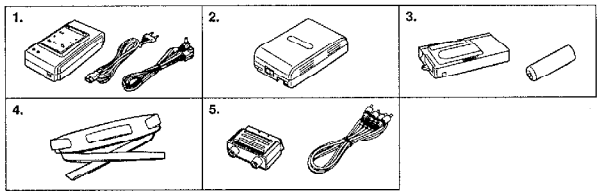


■ **Shooting and Playback Indications**

❼ Shooting Mode (large indication)
❽ Shooting Mode (small indication)
❾ Tape Run Mode
❿ Shooting Pause Mode (large indication)
⓫ Shooting Pause Mode (small indication)
⓬ Recording Review Mode
⓭ Recording of Index Signal
⓮ Playback/Camera Search Mode
⓯ Fast Forward/Cue Mode
⓰ Rewind/Review/Camera Search Mode
⓱ Still Playback Mode
⓲ Tape Counter
⓳ Tape Counter with activated Memory Stop Function
⓴ Remaining Tape Time
㉑ Tape Length
㉒ Date and Time
㉓ Zoom Magnification
㉔ Manual White Balance Mode



㉕ Manual Shooting Mode
㉖ Sports Mode
㉗ Portrait Mode
㉘ Low Light Mode
㉙ Manual Focus Mode
㉚ Anti-Ground-Shooting Check
㉛ Power Save Mode



Before Shooting

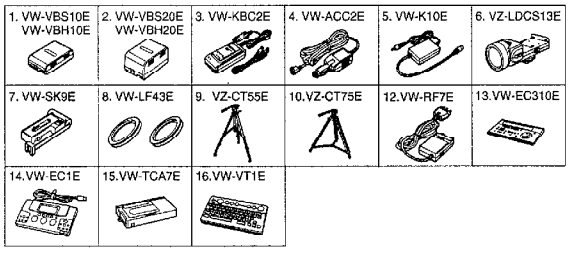
1 Standard Accessories

1. **AC Adaptor**
   For supplying power to the Movie Camera or for charging the Battery Pack
   DC Input Cable and AC Mains Cable
   For connection to the AC Adaptor
2. **Battery Pack**
   For supplying power to the Movie Camera
3. **Cassette Adaptor and Battery**
   For playback on a VTR
4. **Shoulder Strap**
5. **21-pin Adaptor and Audio/Video Cable**
   For connection to a TV set or VTR

Notes:

1. Before connecting, confirm that all systems are turned off and that the connection cables are not damaged.
2. Do not expose the connection cables to high temperature, chemicals and objects with sharp edges; also do not bend the cables excessively.
3. Do not connect the cables with wet hands.
4. When unplugging the Mains Cable, pull it by the plug, not by the cable.

CAUTION:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.



Optional Accessories

1. VW-VBS10E (Ni-Cd Battery Pack)
   VW-VBH10E (Ni-MH Battery Pack)
2. VW-VBS20E (Ni-Cd Battery Pack)
   VW-VBH20E (Ni-MH Battery Pack)
3. Car Battery Charger
4. Car Battery Cord
5. 5-Pin Synchro Cord
6. Video DC Light
7. Shoe Adaptor
8. Filter Kit
9. Standard Tripod
10. Deluxe Tripod
12. RF Adaptor
13. Editing Controller
14. Editing Controller
15. Cassette Adaptor
16. Video Titler

Notes:

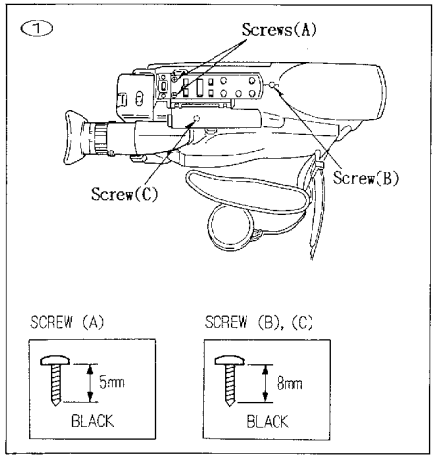
- Some accessories are not available in some countries.
- To mount the Video DC Light or an external microphone on the Movie Camera, the Shoe Adaptor (optional) is necessary.

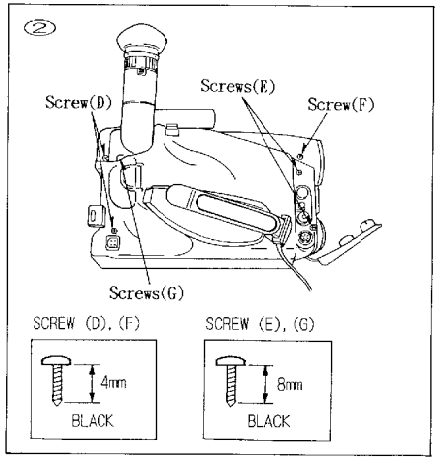
SECTION 2
ADJUSTMENT PROCEDURES

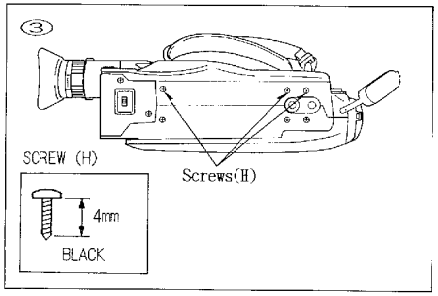
2-1 DISASSEMBLY PROCEDURES

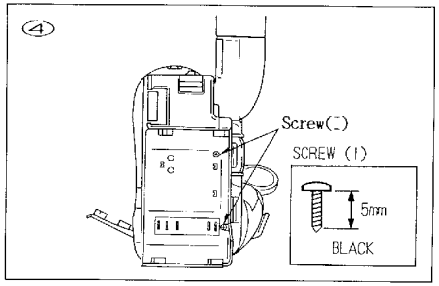
Flow-Chart for Disassembly Procedure

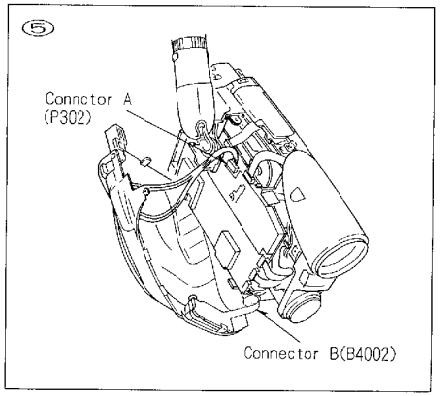
NBR	ITEM/PART	Fig.	Removal(SCREW & Connector)
【1】	Side Case (L)	①	4-SCREW (AX2/B/C)
		②	6-SCREW (D/E/F/G)
		③	3-SCREW (H)
		④	2-SCREW (I)
		⑤	Slightly open the side case (L).
			Disconnect(Connector A/B).
【2】	Cassette Cover	⑥	2-SCREW (J)
【3】	Side Case (R).	⑦	Disconnect(Connector C/D/E/F/G)
	& LENS-COVER		2-SCREW (K/L)
			Unlock---2 Locking Tabs
		⑧	1-SCREW (M)
			Unlock---4 Locking Tabs
		⑨	3-SCREW (N)
【4】	EVF-Unit	⑩	2-SCREW (O/P)
		⑪	1-SCREW (Q)
			Disconnect(Connector H)
		⑫	Unlock---1 Locking Tab
		⑬	Slide the EVF unit.
【5】	Main C.B.A	⑭	3-SCREW (R)
			Disconnect(Connector I/H/J/K/_/M
			Connector N/O)
		⑮	Disconnect(Connector P)
【6】	Lens-Unit	⑯	2-SCREW (S/T)

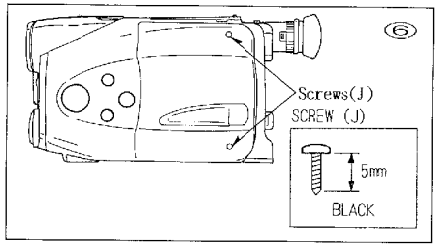


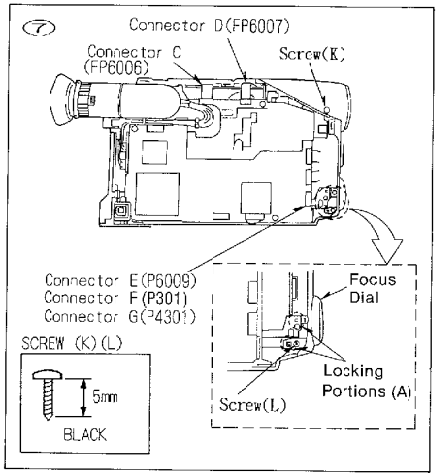


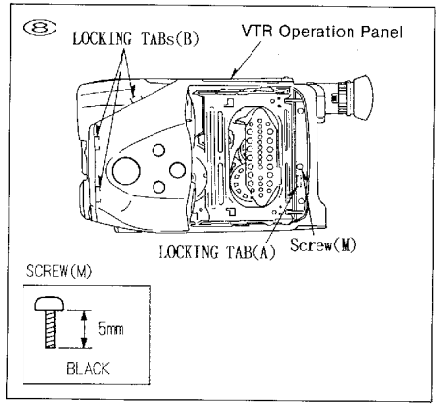


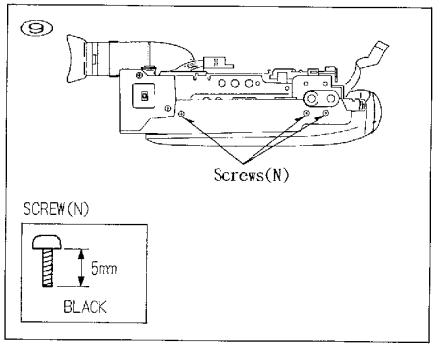


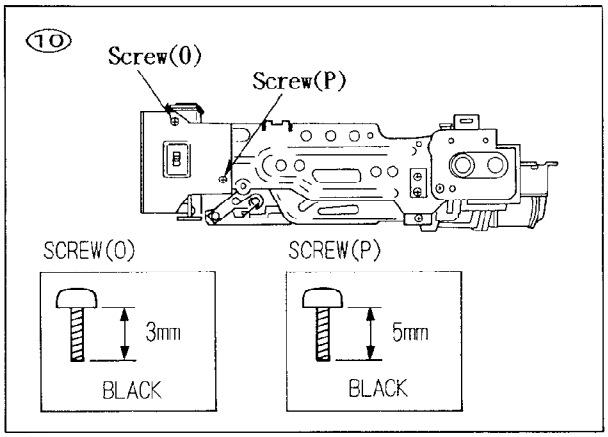


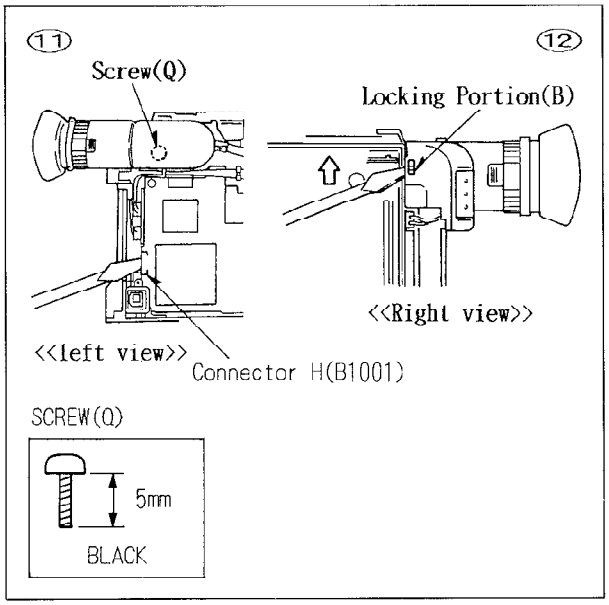


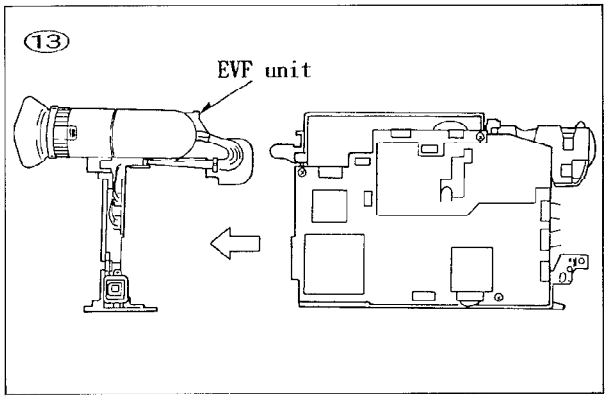


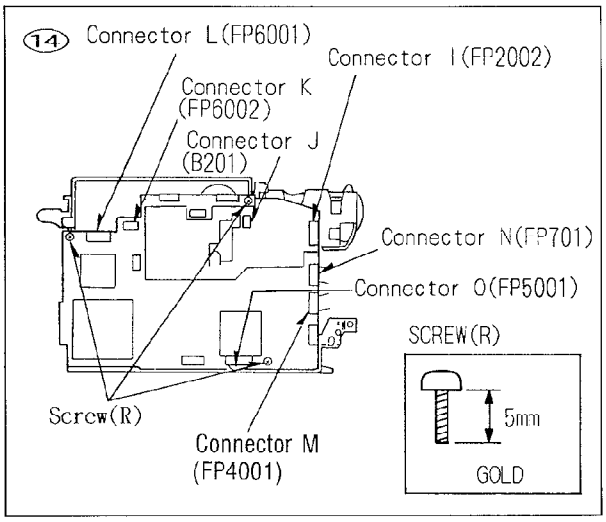


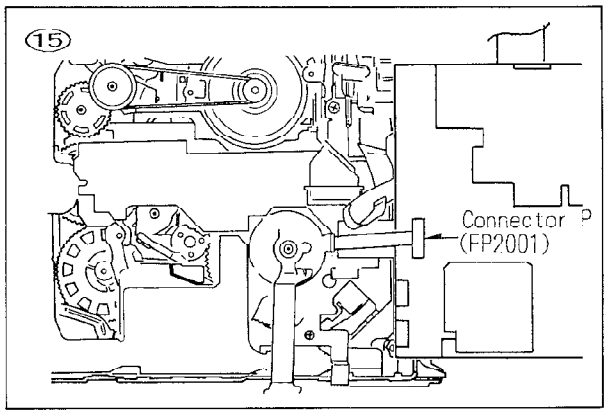


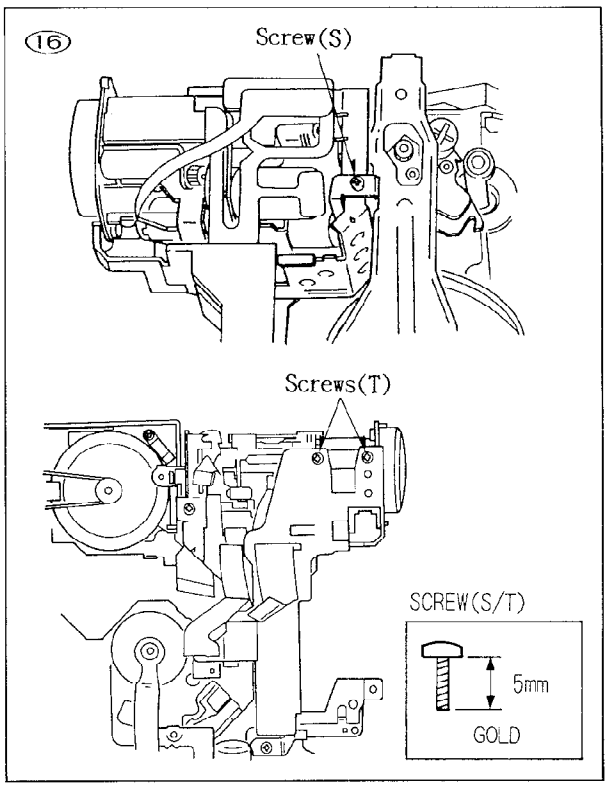

⑩
Screw(O)
Screw(P)
SCREW(O)
3mm
BLACK
SCREW(P)
5mm
BLACK


⑪
Screw(Q)
<<left view>>
Connector H(B1001)
⑫
Locking Portion(B)
<<Right view>>
SCREW(Q)
5mm
BLACK


⑬
EVF unit

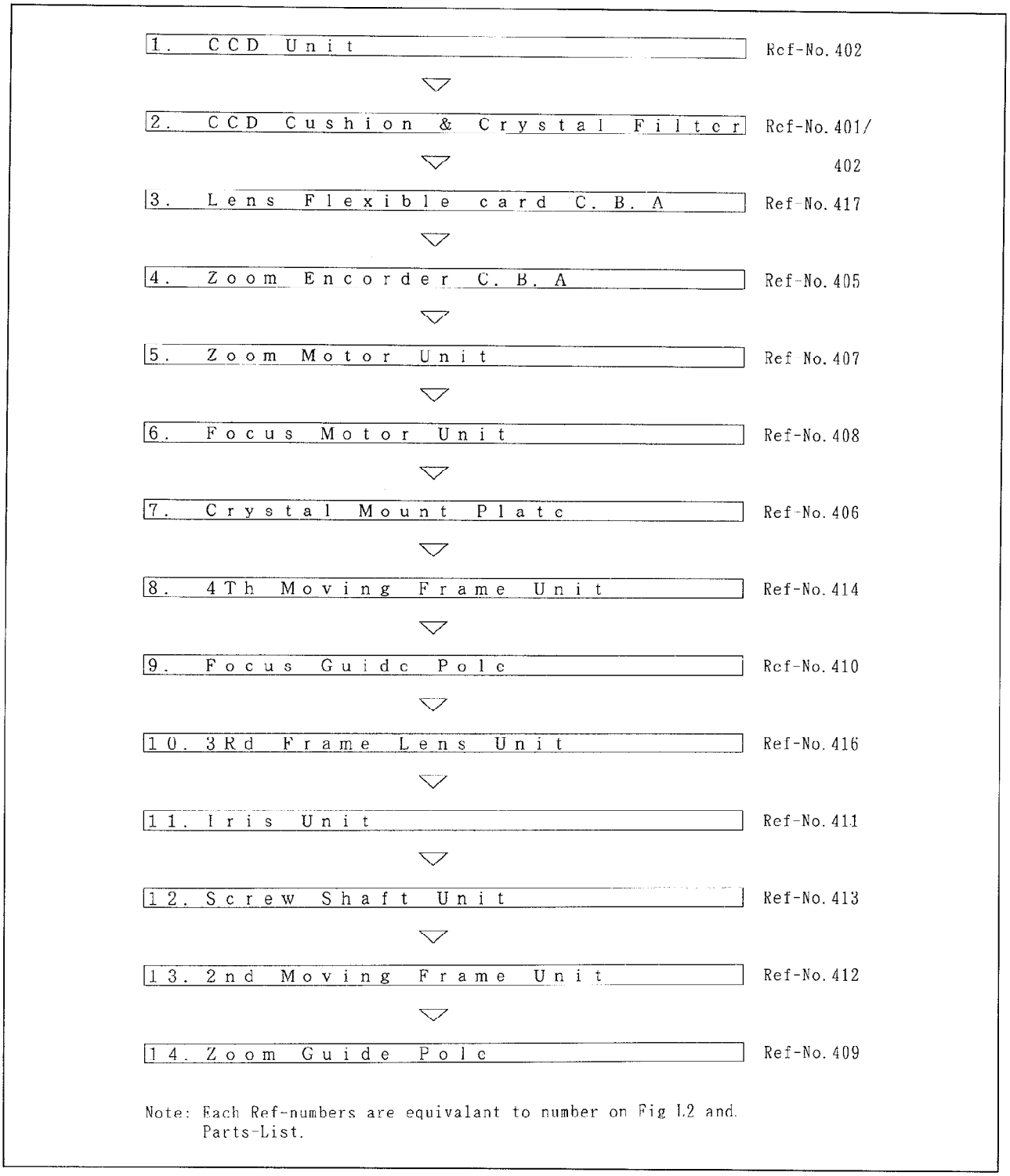

⑭
Connector L(FP6001)
Connector I(FP2002)
Connector K
(FP6002)
Connector J
(B201)
Connector N(FP701)
Connector O(FP5001)
SCREW(R)
5mm
GOLD
Screw(R)
Connector M
(FP4001)


⑮
Connector P
(FP2001)


⑯
Screw(S)
Screws(T)
SCREW(S/T)
5mm
GOLD

2-2. DISASSEMBLY PROCEDURES OF LENS UNIT

The following flowchart describes order or steps for removing the Lens Units and certain printed circuit boards in order to make access to the item needing service.
To reassemble the unit follow the steps in reverse order.



Note: Each Ref-numbers are equivalant to number on Fig L2 and. Parts-List.

Fig. L1

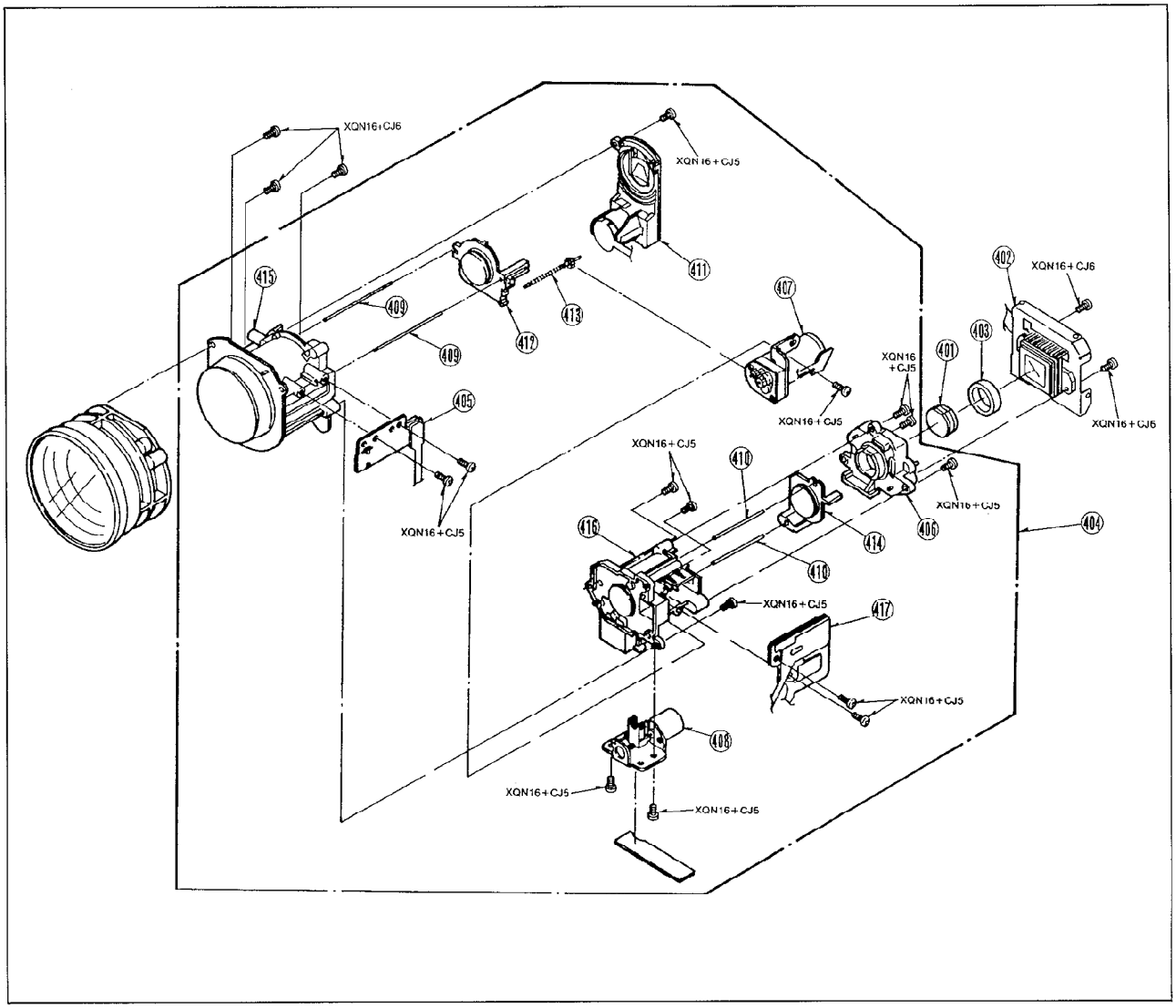

XQN16+CJ6
XQN16+CJ5
411
415
409
412
413
407
402
XQN16+CJ6
403
401
XQN16
+CJ5
XQN16+CJ5
XQN16+CJ6
405
XQN16+CJ5
XQN16+CJ5
410
406
XQN16+CJ5
404
416
414
410
XQN16+CJ5
417
XQN16+CJ5
408
XQN16+CJ5
XQN16+CJ5

Fig. L2

2-3. ELECTRICAL ADJUSTMENT FOR E.V.F. SECTION

The following Equipments are required for Adjutment of Electric Viewfinder.

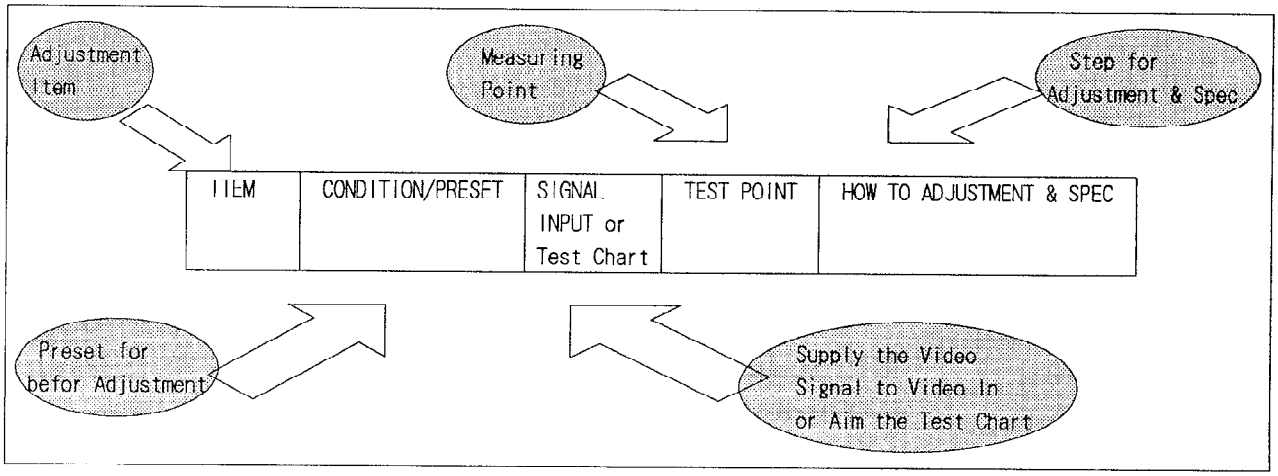
1:Chart ⇨ Ball-Chart/Registration-Chart/Gray Scale-Chart

2:Tools ⇨ Plastic Tip Driverare /VFK0839

The following adjustment are Electric Viewfinder.

PREPARATION: (A). Remove the Casing panels.
(B). Connect the Viewfinder to unit with Extension Cable VFK0839(30Pin). ⇨ Please Refer to Fig. E1
(C) The camera unit must be completely aligned befor viewfinder adjustment.

How to Read the Adjustment Procedure



ADJUSTMENT FOR E.V.F SECTION

ITEM	CONDITION/PRESET	SIGNAL INPUT or Test Chart	TEST POINT	HOW TO ADJUSIMENT & SPEC
1. CENTRFING	Aim the camera at Registration chart.	Registration Chart	E.V.F on Screen	Adjust the deflection-yoke centreing magnets turning so that picture on E.V.F is centred. Please Refer to Fig. E2
2. FOCUS	Aim the camera at Ball chart.	Ball Chart	E.V.F on Screen	Adjust the VR803 for best resolution in Viewfinder. Note: After performed this adjustment, confirm "A" part of VR803. "A" part is outside of 100 degree. Please Refer to Fig. E3
3. VERTICAL SIZE	Aim the camera at Gray-Scale chart	Gray Scale Chart	E.V.F & TV on Screen	Adjust the VR801 for best vertical size. (Picture does not roll as shown in Fig. E4.)
4. BRIGHTNESS	Aim the camera at Gray-Scale chart	Gray Scale Chart	E.V.F & TV on Screen	Adjust the VR804 so that brightness in viewfinder is same as monitor TV.

Preparation

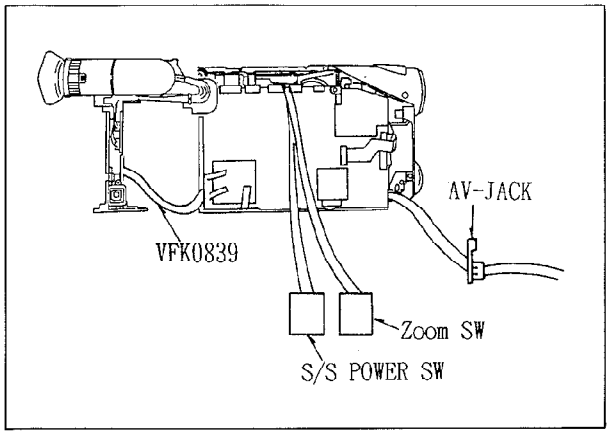


Fig. E1

CENTREING ADJUSTMENT

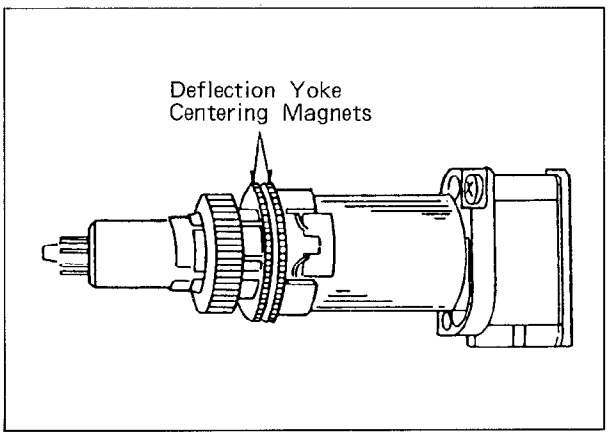


Fig. E2

FOCUS ADJUSTMENT

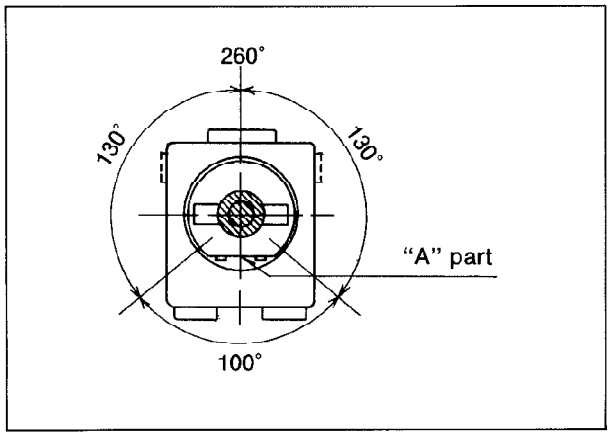


Fig. E3

VERTICAL ADJUSTMENT

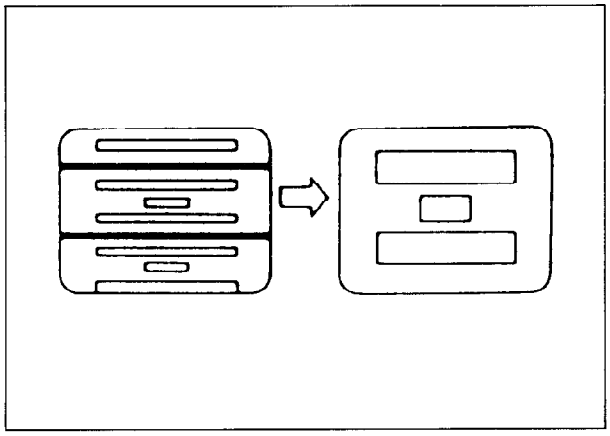
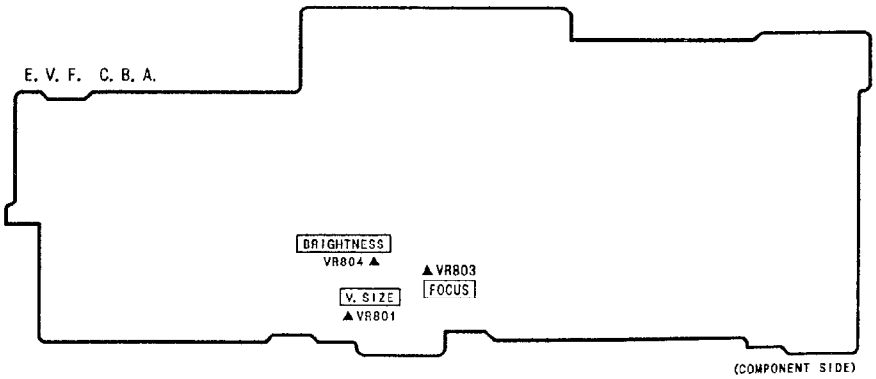


Fig. E4

LOCATION OF TEST POINTS & CONTROLS



Note: Adjutment for CAMERA/VTR Section requied EVR fixture.
So, adjustment procedure described on Service manual VMD9501M103

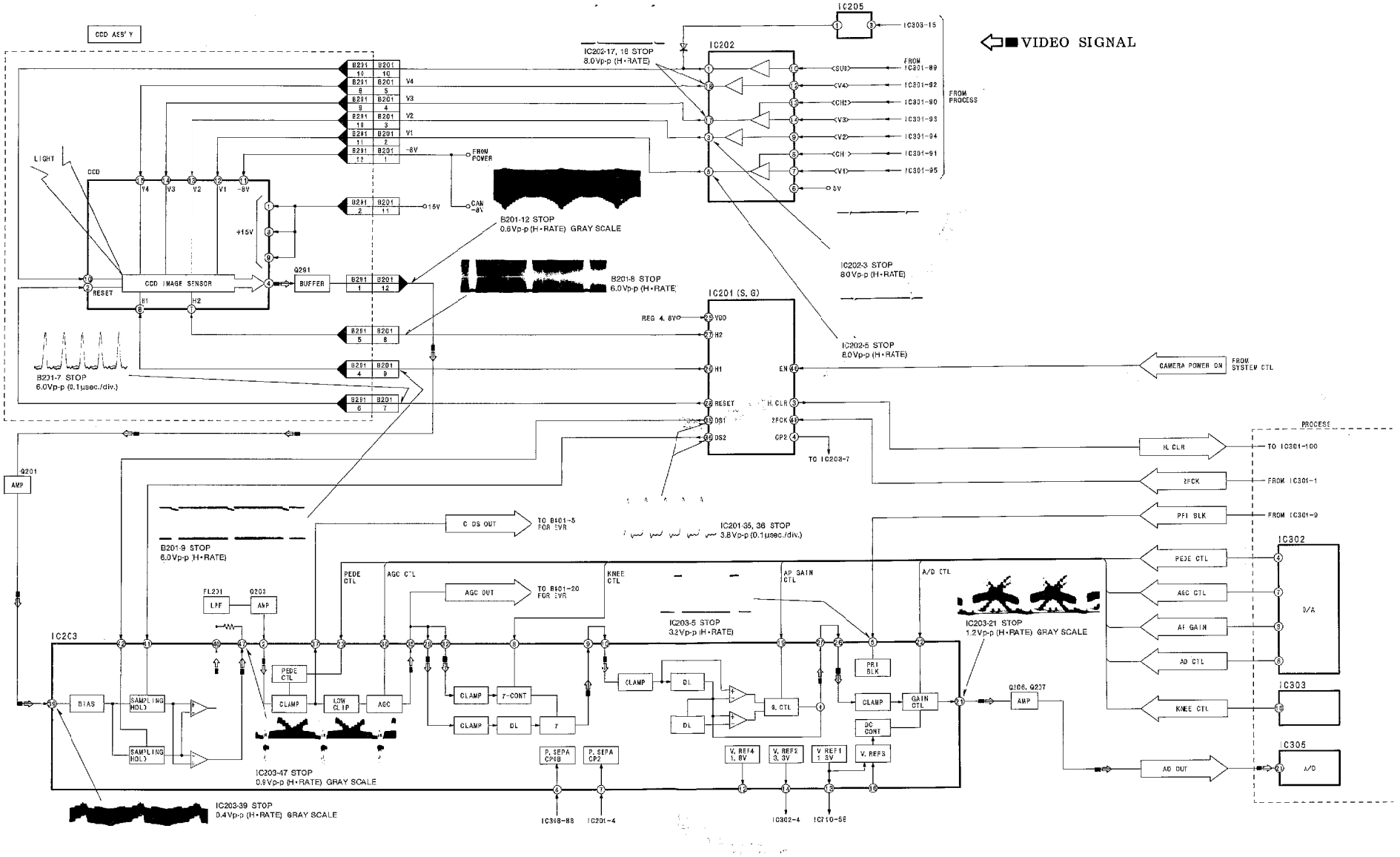
SECTION 3
BLOCK DIAGRAMS & SCHEMATIC DIAGRAMS

3-1 ABBREVIATIONS

INITIAL/LOGO		ABBREVIATIONS
	3R3V	3.3V
A	A.TR	AUTO TRACKING
	ABSF	FOCUS ENCODER INPUT
	ADCLK	A/D CLOCK
	ADCNT	A/D CONTROL
	ADREC	AUDIO DELAIED REC
	ADUB	AUDDIO DUBBING
	AE	AUTO EXPOSE
	AECNT	AUTO EXPOSE CONTROL
	AEIRQ	AUTO EXPOSE INTERRUPT REQUEST
	AFADE	AUDIO FADE
	AGCCNT	AGC CONTROL
	AGS	ANTI GROUND SHOOTING
	ALCCNT	ALC CONTROL
	ALCMAIN	ALC DRIVE
	AMUT	AUDIO MUTE
	AORP	AUDIO OVER LAP PULSE
	APS	AUTO POWER SAVE
	ARTV	ARTIFICAL VERTICAL SYNC
	AWTB	AUTO WHITE BALANCE B-Y
	AWTR	AUTO WHITE BALANCE R-Y
B	B-Y KB	B-Y CARRIER BALANCE
	BACK	BACK-UP
	BEND	BURST FLUG PULSE
	BFA	BURST FLUG FOR ENCODER
	BL	BACK LIGHT
	BLDIN	BACK LIGHT DRIVE INPUT
	BLDOUT	BACK LIGHT DRIVE OUTPUT
	BLK	BLANKING PULSE
	BM	BALANCED MODULATOR
	BUF	BUFFER
C	CAPVM	CAPSTAN MOTOR CURRENT
	CCW	COUTER CLOCKWISE
	CDS	CORRELATE DOUBLE SAMPLING SIGNAL
	CFM 1~4	CHROMINANCE FIELD MEMORY
	CGC	CHROMINANCE GAIN
	CH1	Channel 1(Odd Field)
	CHR MIX	CHARACTER MIX
	CK or CLK	CLOCK
	CLK2	CLOCK 2(824XFH: 12.875MHz)
	CFEM	CHORMINACE MEMORY SIGNAL
	CMO	CHROMA MEMORY OUTPUT
	CDO~7	CHORMO OUTPUT(DIGITAL)
	CP	CLAMP PULSE
	CPOB	OB CLAMP PULSE
	CS	CHIP SELECT
	CSEL1~2	CLOCK PHASE SELECET
	CW	CLOCWISE
	CYLVM	CYLINDER MOTOR CURRENT
D	D MODE0~2	DIGITAL MODE SWITCH SIGNAL
	DAC	DIGITA/ANALOG CONVERTER
	D0~D8(D9)	VIDEO OUT(DIGITAL 8 or 9 BIT)
	DCLR	DIGITAL CLEAR
	DICLK	DIGITAL CLOCK
	DISCS	DIS CHIP SELECT
	DL	DELAY LINE
	DRK	DARK
	DS 1~2	DOUBLE SAMPLING PULSE
	DSP	DIGITAL SIGNAL PROCESS
	DZ	DIGITAL ZOOM
	DZ/OZ	DIGITAL ZOOM/OPTICAL ZOOM
E	ECM	ELECTRIC CONDENSER MIC
	EEPROM	ELECTRIC ERASABLE PROGRAMABLE-READ
	(E^2 PROM)	ONLY MEMORY
	ENV	ENVELOPE DITECT
	EQ	EQUALIZER
	EZOOM	ELECTRIC ZOOM
F	FAR	FAR(FOCUS)
	FCK	CLOCK
	FENC	FOCUS ENCODER
	FH2B	FH/2(15.625KHz÷2 =7.8125KHz)
	FM CS	CHIP SELECT FOR FM-AUDIC
	FM MUTE	FM AUDIO MUTE
	FMD~7(8)	FIELD MEMORY INPUT 8BIT(or 9BIT)
	FMD REC	FM AUDIO DELAYED REC
	FMOEM	FIELD MEMORY ENABLE
	FNO	F VALUE
G	GCNT	GAIN CONTROL
H	H1~H2	H.CCD DRIVE PULSE
	H.A SW	HEAD AMP SW
	HBRST	HIGH BRIGHT SET
	HCLR	HIGH CLEAR
	HEX	HEXADECIMAL
	HLT	HIGHT BRIGHT SIGNAL
I	INTER	INTERVAL RECORDING
	IOU	R-Y ANALOGUE SIGNAL OUTPUT
	IOV	B-Y ANALOGUE SIGNAL OUTPUT
	IRQ	INTERRUPT REQUEST
	IRIS/SH	IRIS/SHUTTET CONTROL
K	KANDO	DIGITAL GAIN UP
L	LD	LOAD PULSE
	LEDCNT	LED CONTROL
	LI-BATT	LITHIUM BATTERY
	LSB	LEAST SIGNFICANT BIT
	LVL	VL FILTE SWITCHING
M	MD	MODILATOR
	MFF	MANUAL FOCUS FAR
	MFN	MANUAL FOCUS NEAR
	MSB	MOST SIGNFICANT BIT
	MIX N.R.D	NON REC DATA MIX

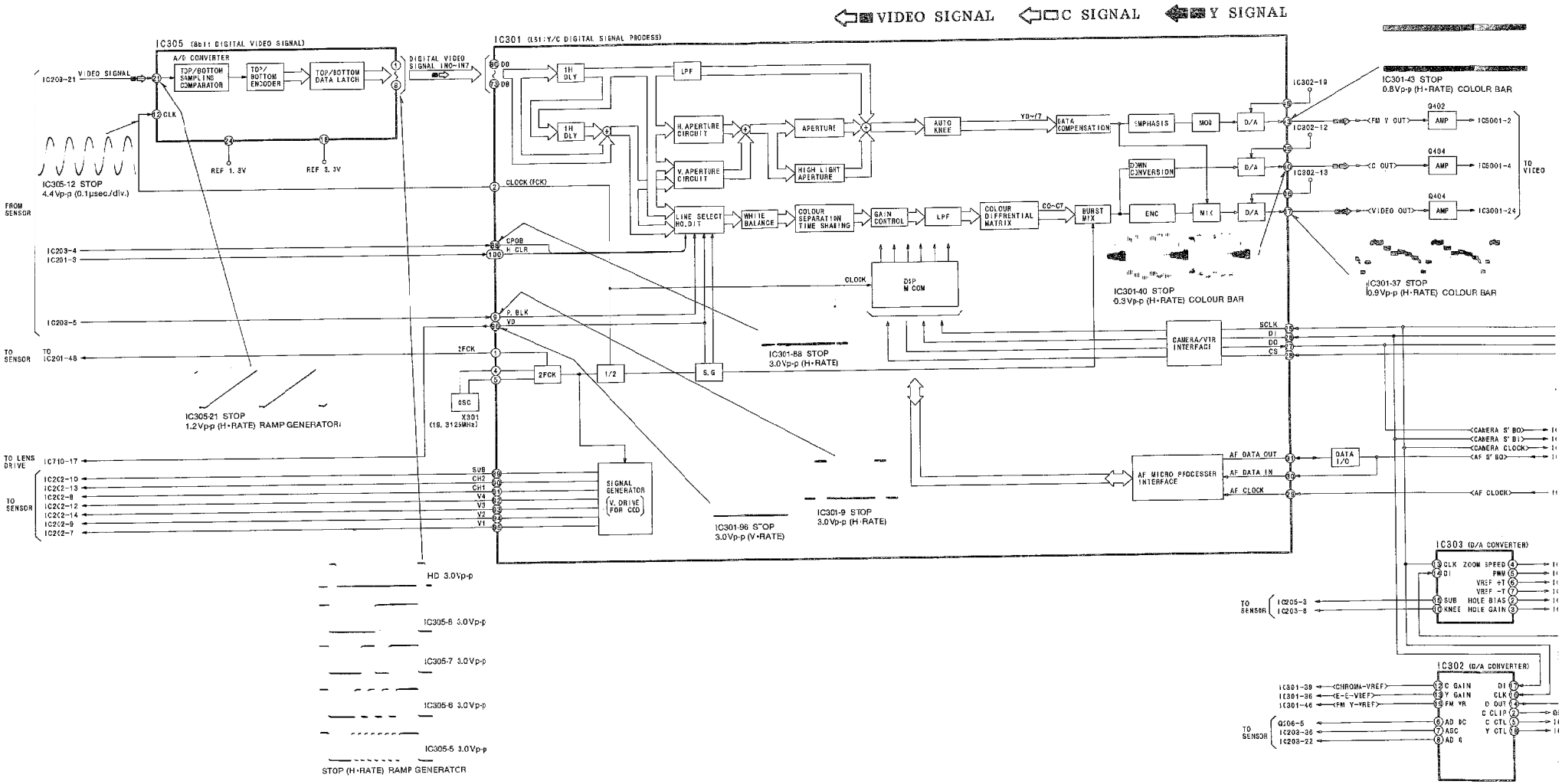
INITIAL/LOGO		ABBREVIATIONS
N	N/F	NEAR/FAR(FOCUS)
	N/P	NTSC/PAL
	NC	NO CONNECTION
	NC1~3	NPN TRANSISTOR C-SIDE
	NDE	NON LINER DE-EMPHAIS
	NEAR	NEAR(FOCUS)
	NLE	NON LINER EMPHASIS
	NRD	NON REC DATA
	NRDBLK	NON REC DATA BLNKING
	NRE	READ ENABLE INPUT(LOW ACTIVE)
	NWE	WRITE ENABLE(LOW ACTIVE)
O	OBCNT	OPTICAL BLACK CONTROL
	OE	OUTPUT ENABLE
	OP	OPERATIONAL AMP OUTPUT
	OSD	ON SCREEN DISPLAY
P	PB1~3	PNP TRANSITOR B-SIDE
	PBLK	PRE-BLANKING
	PCBM(B-Y)	B-Y CARRIER BALANCE
	PCBM(R-Y)	R-Y CARRIER BALANCE
	PEDECNT	PEDESTAL CONTROL
	PORIN or POR	POWER ON RESET
	PREAP	PRE-AMP
	PREBLK	PRE-BLANKING
	PT	PROTECT FOR V VOLTAGE
	PWM	PULSE WIDTH MODULATOR
R	R/B	READT/BUSY
	R-Y KB	R-Y CARRIER BALANCE
	RAD	READ ADDRESS DATA
	RAE	READ ADDRESS ENABLE
	RE	READ ENABLE
	RE	ROTARY ERASE HEAD
	RERASE	ROTARY ERASE HEAD
	RST	RESET
	RSTPWD	RESET POWER DOWN INPUT
	RSTR	RESET READ
	RSTW	RESET WRITE
S	S/S	START/STOP
	SBO	SERIAL OUTPUT
	SBD	SERIAL DATA
	SCLK	SERIAL CLOCK
	SCR	SERCH
	SDET	S-VHS DETECT
	SH/IRIS	SHUTTER/IRIS CONTROL
	STAB	S-VHS TAB SWITCH
	STRB	STRBO MODE
	SUB CNT	SUB CONTROL
T	TBC	TIME BASE CORRECTOR
	TBC.C OUT	TIME BASE CORRECTOR CHROMA OUT
	TBC.V OUT	TIME BASE CORRECTOR VIDEO OUT
	TL	TORQUE LIMIT
	TRFIX	TRACKING FIX
	TRIWAVE	TRIANGLE WAVE
	TRP	TRAP
U	U/V SECT	R-Y/B-Y SELECT SIGNAL
	UVSEL	R-Y/B-Y SELECT SIGNAL
V	V1~V4	V.CCD DRIVE PULSE
	VB	VH FILTER SWITCHING
	VCO	VOLTAGE CONTROL OSCILLTCR
	VCTRL	VOLTAGE CHARGE CONTROL
	VD	VERTICAL DRIVE PULSE
	VDREC	VIDEO DELAYED REC
	VIN	VIDEO IN(ANALOGUE)
	VITC	VETICAL INTERVAL TIME CODE
	VMD1~VMD3	VELOCITY MODE DATA(SHUTTER)
	VMVH	VH FILTER SWITCHING
	VORP	VIDEO OVERLAP
	VRB	VOLTAGE REFERENCE BOTTOM(1.3V)
	VREF1R3V	REFERENCE VOLTAGE 1.3V
	VREF3R3V	REFERENCE VOLTAGE 3.3V
	VREFH	REFERENCE VOLTAGE HIGH SIDE
	VREFL	REFERENCE VOLTAGE LOW SIDE
	VRI	REFERENCE VOLTAGE INPUT
	VRO	REFERENCE VOLTAGE OUTPUT
	VRT	VOLTAGE REFERENCE TOP(3.3V)
	VSS	VERTICAL SYNC SIGNAL
W	WAD OR WAE	WRITE ADDRESS ENABLE
	WE	WRITE ENABLE
	WHD	WIDE HORIZONTAL DRIVE PULSE
Y	Y0~Y7(Y8)	8BIT(9BIT)LUMINANCE DIGITAL SIGNAL
	YNCST	NOISE CANCELER
	YNR	NOISE REDUCTION
Z	Z ENC	ZOOM ENCODEF
	Z-MIC	ZOOM MIC
	ZENC1/ZENC4	ZOOM ENCEODER OUTPUT
	ZMTER	ZOOM MOTOR TELE SIDE
	ZMT(+)/(-)	ZOOM MOTOR (+)/(-)
	ZMW	ZOOM MOTOR WIDE SIDE

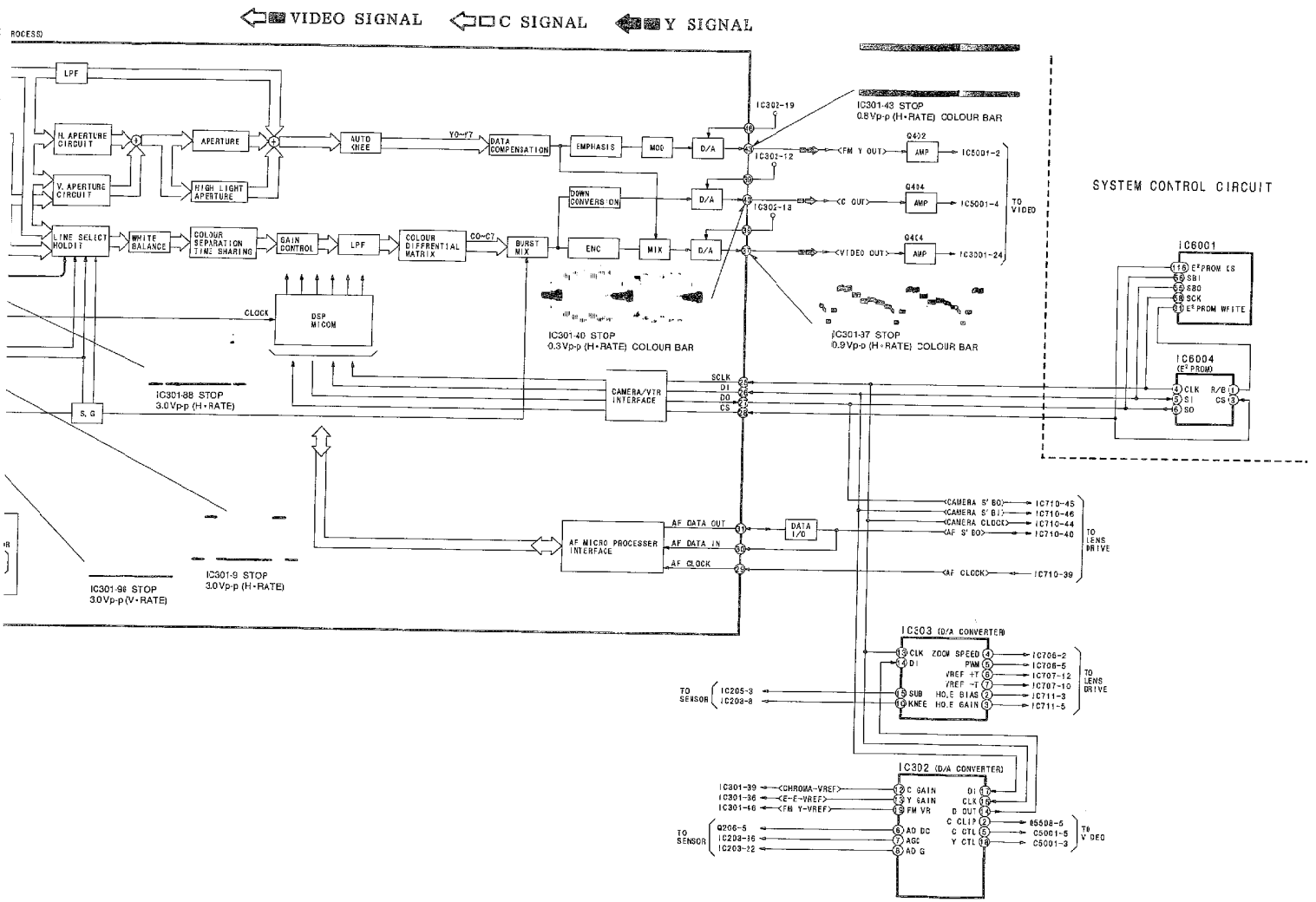
3-2. SENSOR BLOCK DIAGRAM

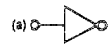
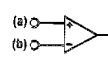
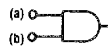
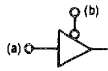
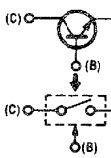
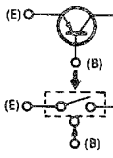
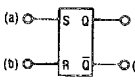


Back Page:
ABBREVIATIONS Section

3-3. PROCESS BLOCK DIAGRAM

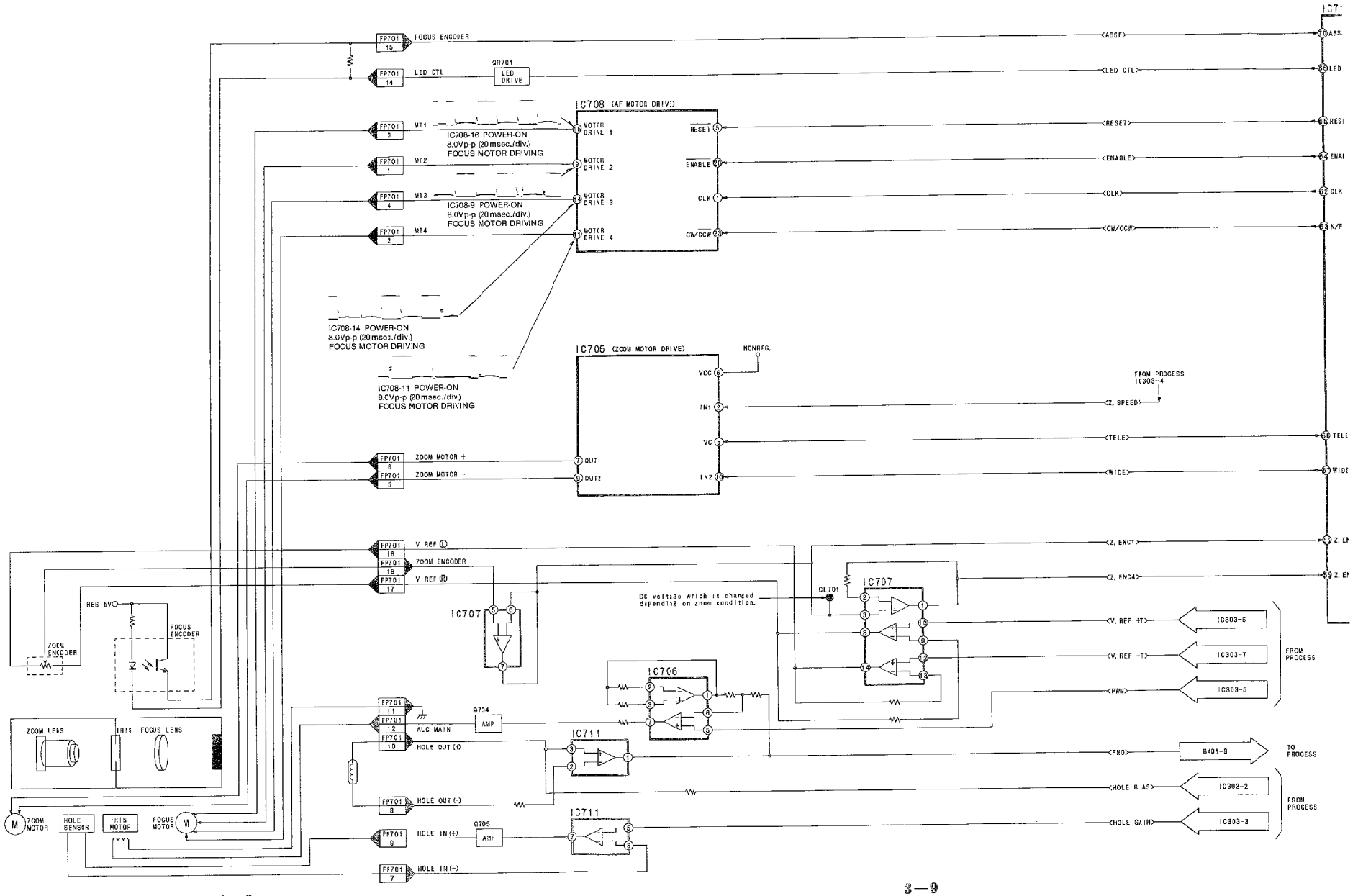


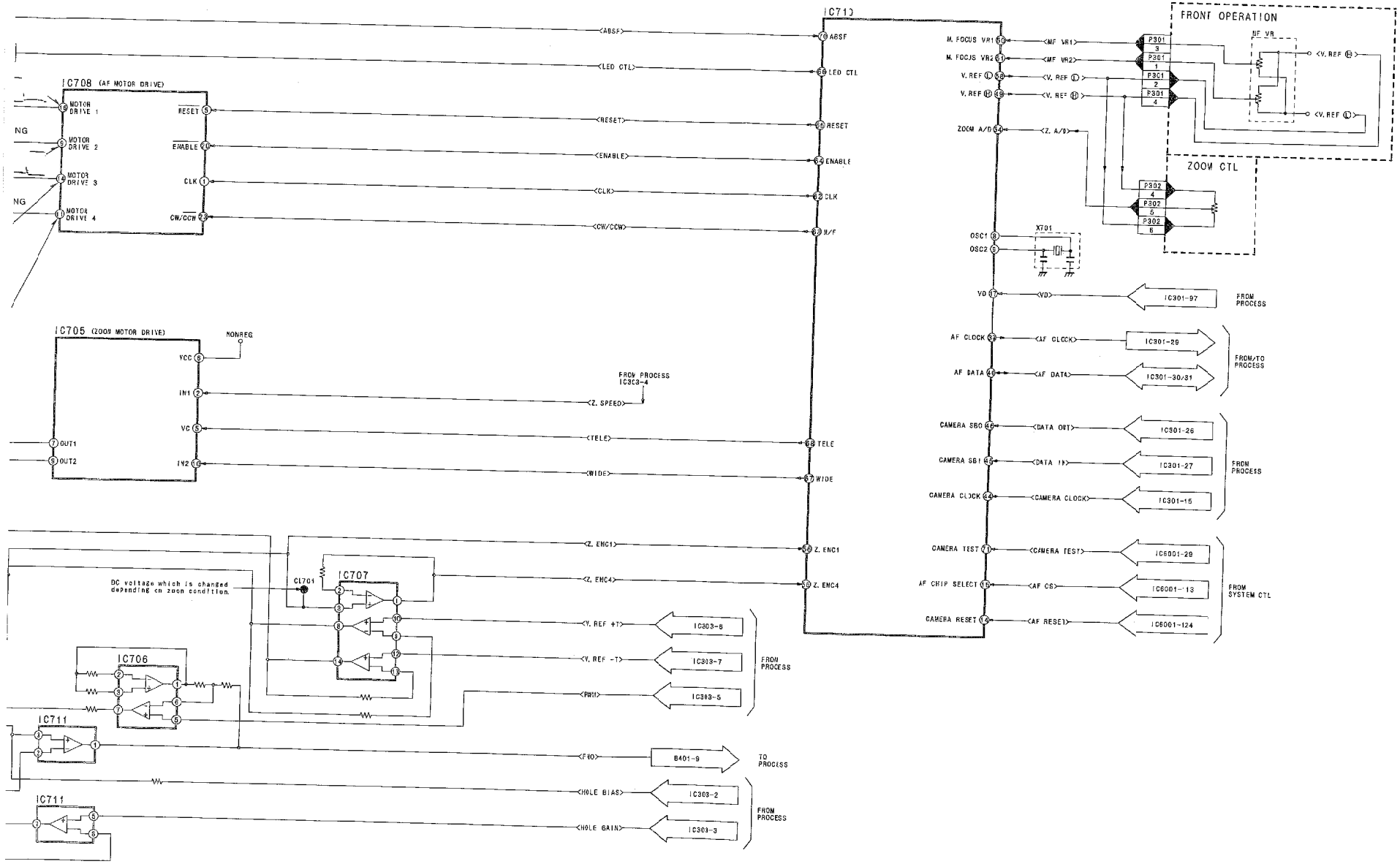


SYMBOL	TRUTH VALUE TABLE
INVERTER 	IN (a) H L / OUT (b) L H
COMPARTOR 	IN (a) (b) (a)>(b) (a)<(b) / OUT (c) H L
AND CIRCUIT 	IN (a) L L H H / (b) L H L H / OUT (c) L L L H
OR CIRCUIT	IN (a) L L H H / (b) L H L H / OUT (c) L H H H
THREE STATES BUFFER 	IN (a) H L H or L / (b) L L H / OUT (c) H L ※ ※ High Impedance
TR. SW (NPN TYPE) 	BASE H L / TR. SW ON OFF
TR. SW (PNP TYPE) 	BASE H L / TR. SW OFF ON
R-S TYPE FLIP-FLOP 	IN (a) L L ⎍ / (b) L ⎎ L / OUT (c) ※ L H / (d) ◆ H L ※ Initial conciton is maintained. ◆ Initial conciton is reversed.

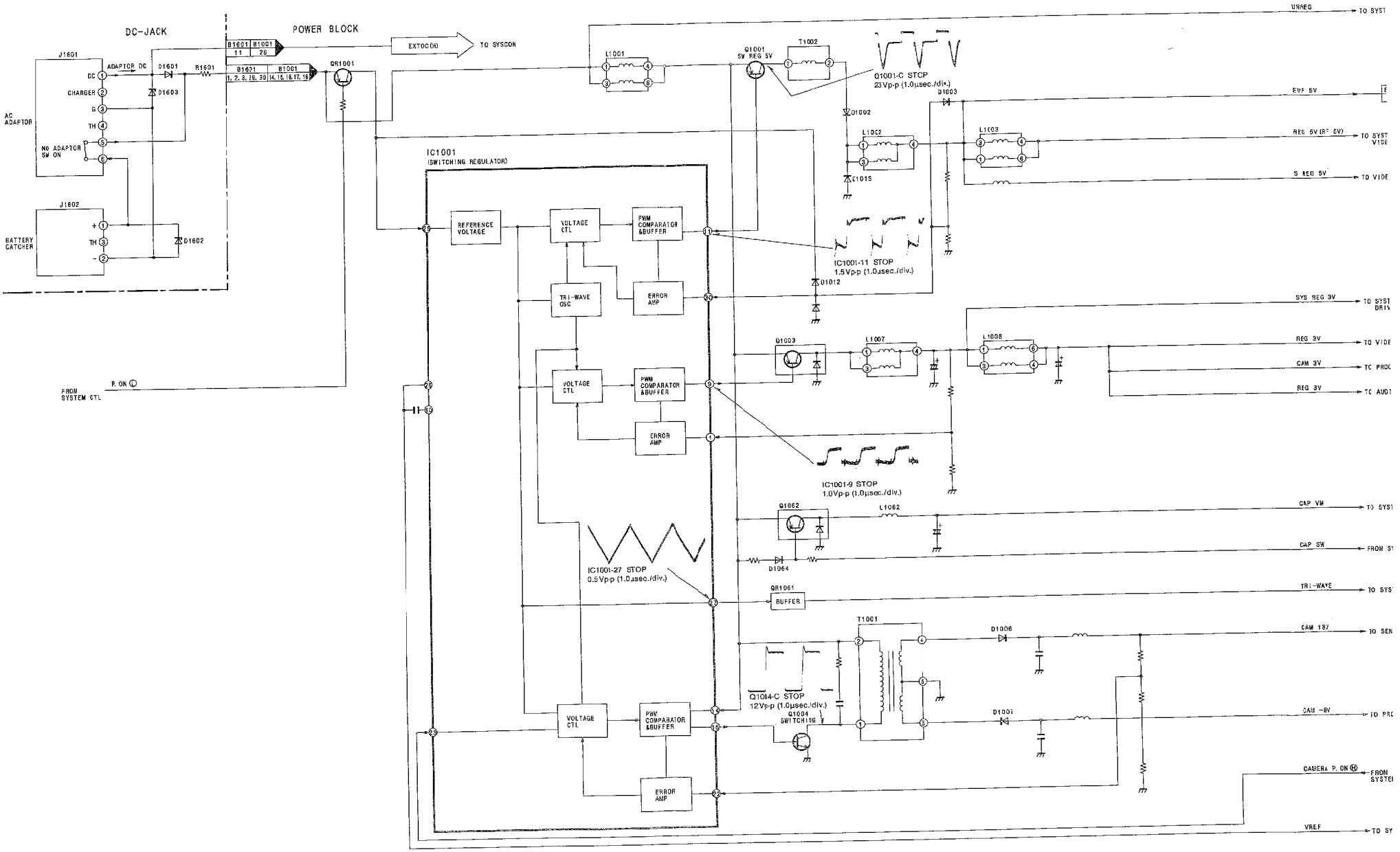
Next Page:
LENS DRIVE Section

3-4 LENS DRIVE BLOCK DIAGRAM

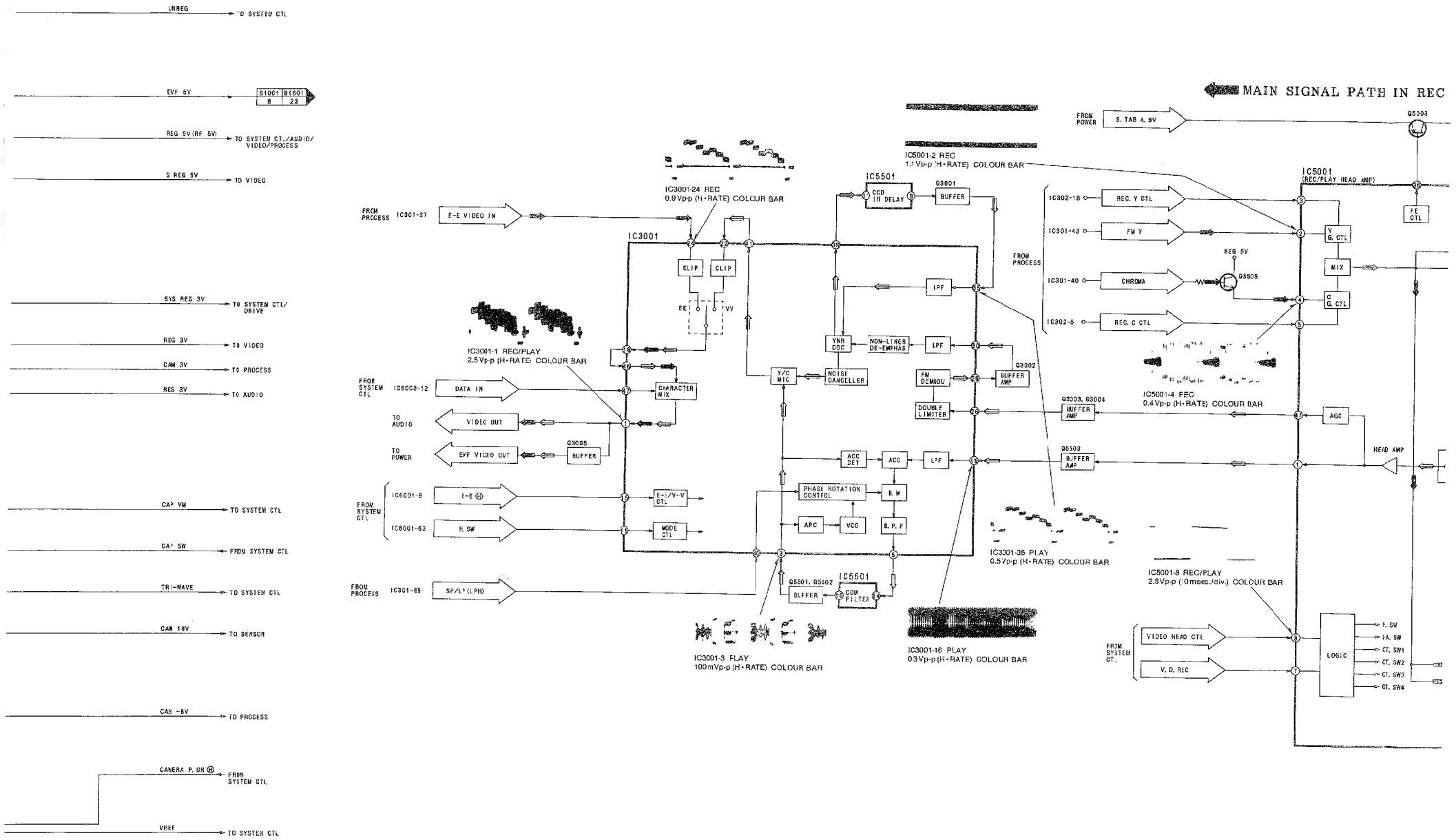



IC710
IC708 (AF MOTOR DRIVE)
MOTOR DRIVE 1
MOTOR DRIVE 2
MOTOR DRIVE 3
MOTOR DRIVE 4
RESET
ENABLE
CLK
CW/CCW
NG
IC705 (ZOOM MOTOR DRIVE)
NONREG
VCC
IN1
VC
IN2
OUT1
OUT2
FROM PROCESS IC303-4
<Z. SPEED>
<ABSF>
<LED CTL>
<RESET>
<ENABLE>
<CLK>
<CW/CCW>
<TELE>
<WIDE>
<Z. ENC1>
<Z. ENC4>
ABSF
LED CTL
RESET
ENABLE
CLK
M/F
TELE
WIDE
Z. ENC1
Z. ENC4
DC voltage which is changed depending on zoom condition.
CL701
IC707
IC706
IC711
IC711
<V. REF +T>
<V. REF -T>
<PWM>
<FMO>
<HOLE BIAS>
<HOLE GAIN>
IC303-6
IC303-7
IC303-5
B401-9
IC303-2
IC303-3
FROM PROCESS
TO PROCESS
FROM PROCESS
M. FOCUS VR1
M. FOCUS VR2
V. REF
V. REF
ZOOM A/D
OSC1
OSC2
X701
VD
AF CLOCK
AF DATA
CAMERA SBO
CAMERA SBI
CAMERA CLOCK
CAMERA TEST
AF CHIP SELECT
CAMERA RESET
<MF VR1>
<MF VR2>
<V. REF>
<V. REF>
<Z. A/D>
<VD>
<AF CLOCK>
<AF DATA>
<DATA OUT>
<DATA IN>
<CAMERA CLOCK>
<CAMERA TEST>
<AF CS>
<AF RESET>
FRONT OPERATION
MF VR
<V. REF>
<V. REF>
P301
P301
P301
P301
ZOOM CTL
P302
P302
P302
IC301-97
IC301-29
IC301-30/31
IC301-26
IC301-27
IC301-15
IC6001-29
IC6001-13
IC6001-124
FROM PROCESS
FROM/TO PROCESS
FROM PROCESS
FROM SYSTEM CTL

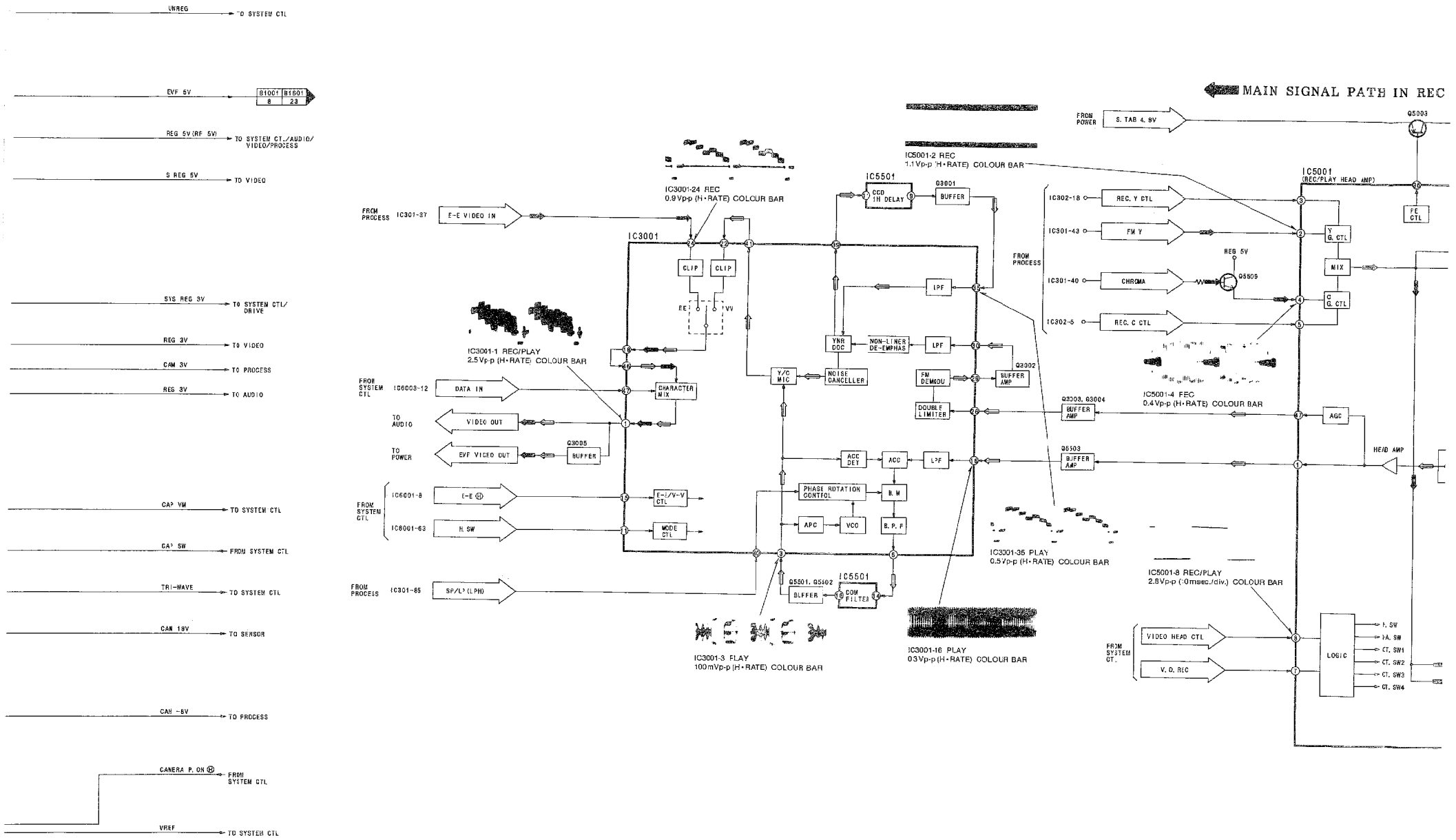
3-5. POWER BLOCK DIAGRAM



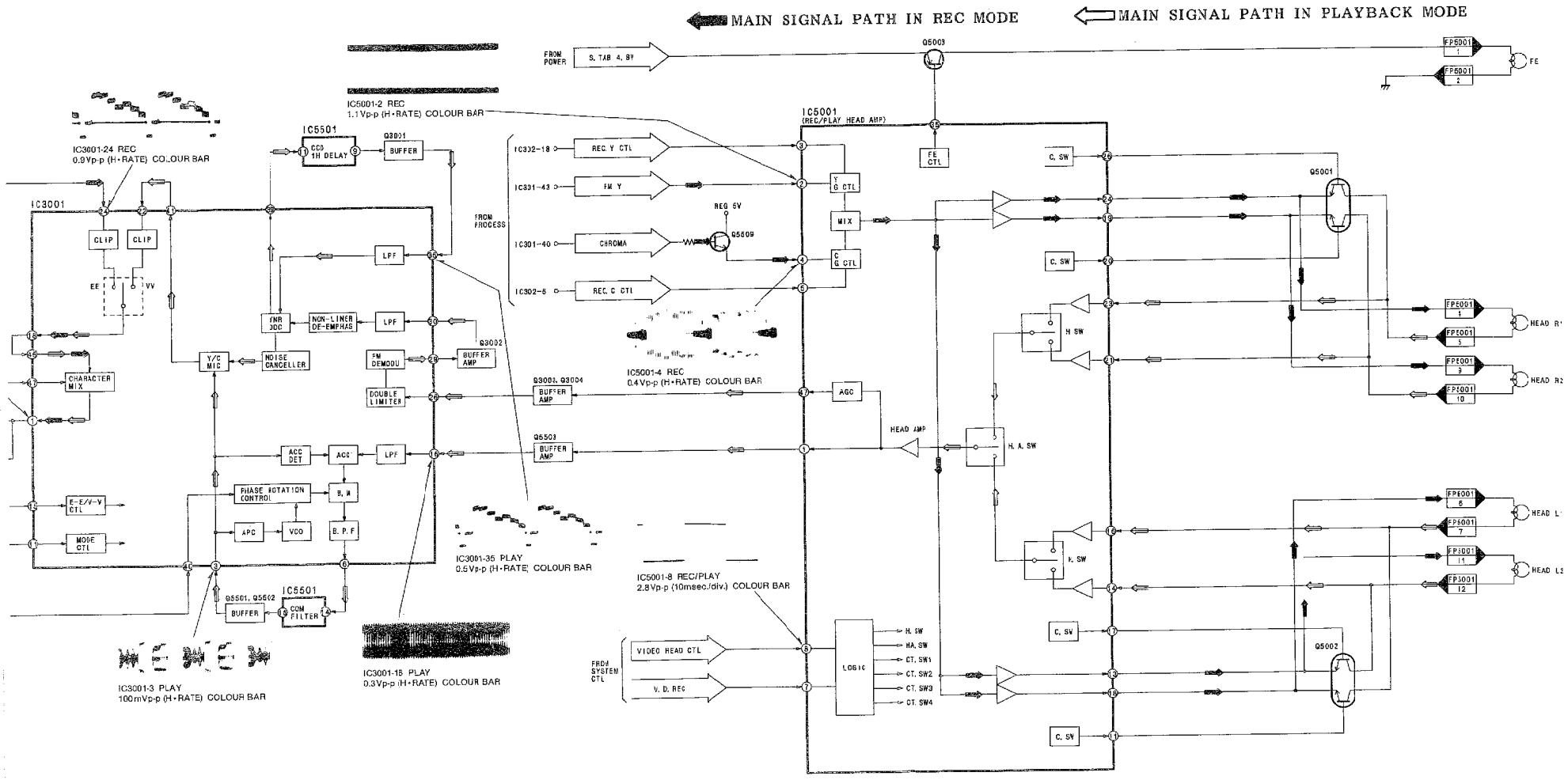
3-6 LUMINANCE/CHROMINANCE & HEAD AMP BLOCK DIAGRAM



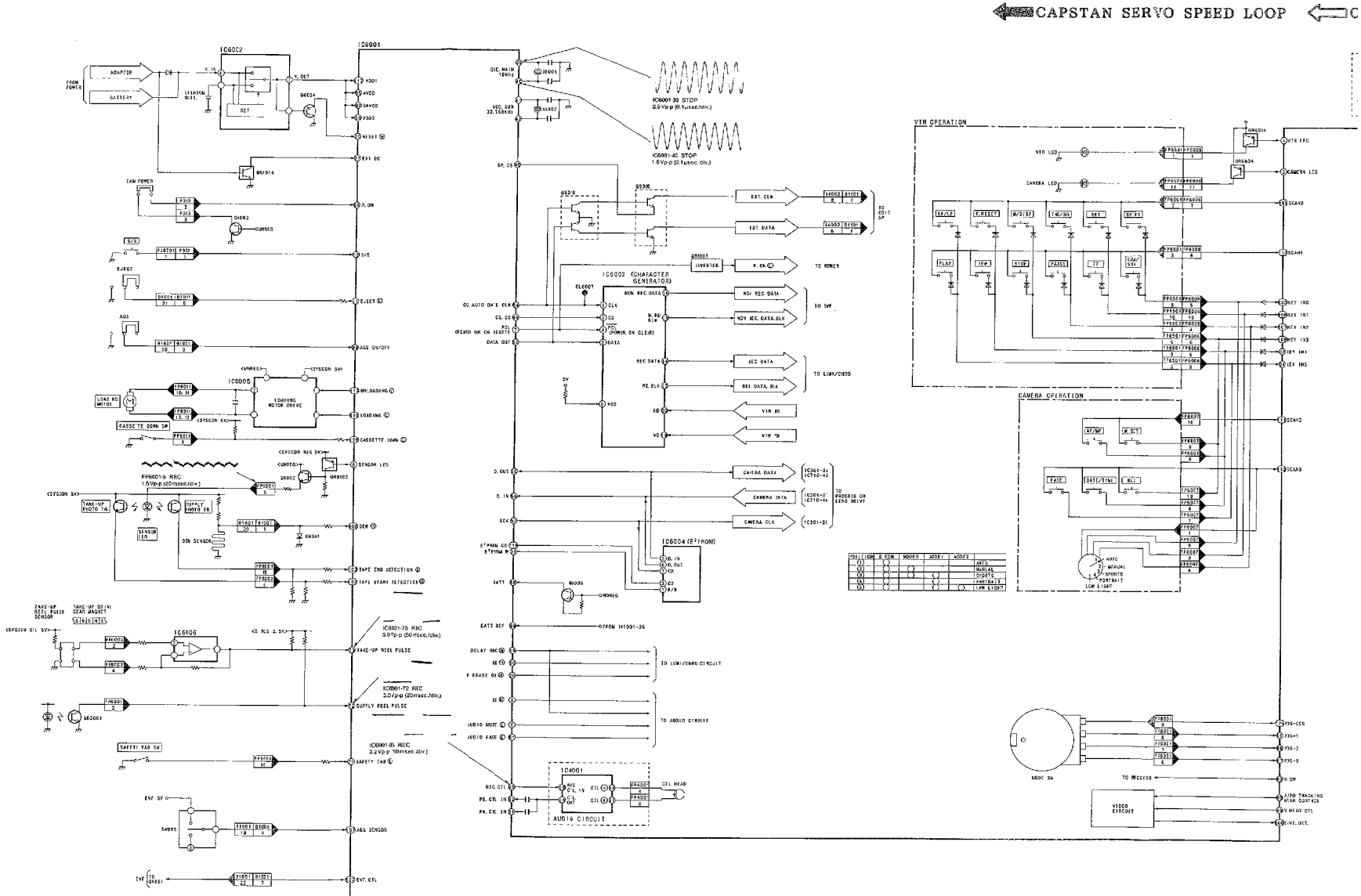
3-6 LUMINANCE/CHROMINANCE & HEAD AMP BLOCK DIAGRAM



[ANCE & HEAD AMP BLOCK DIAGRAM

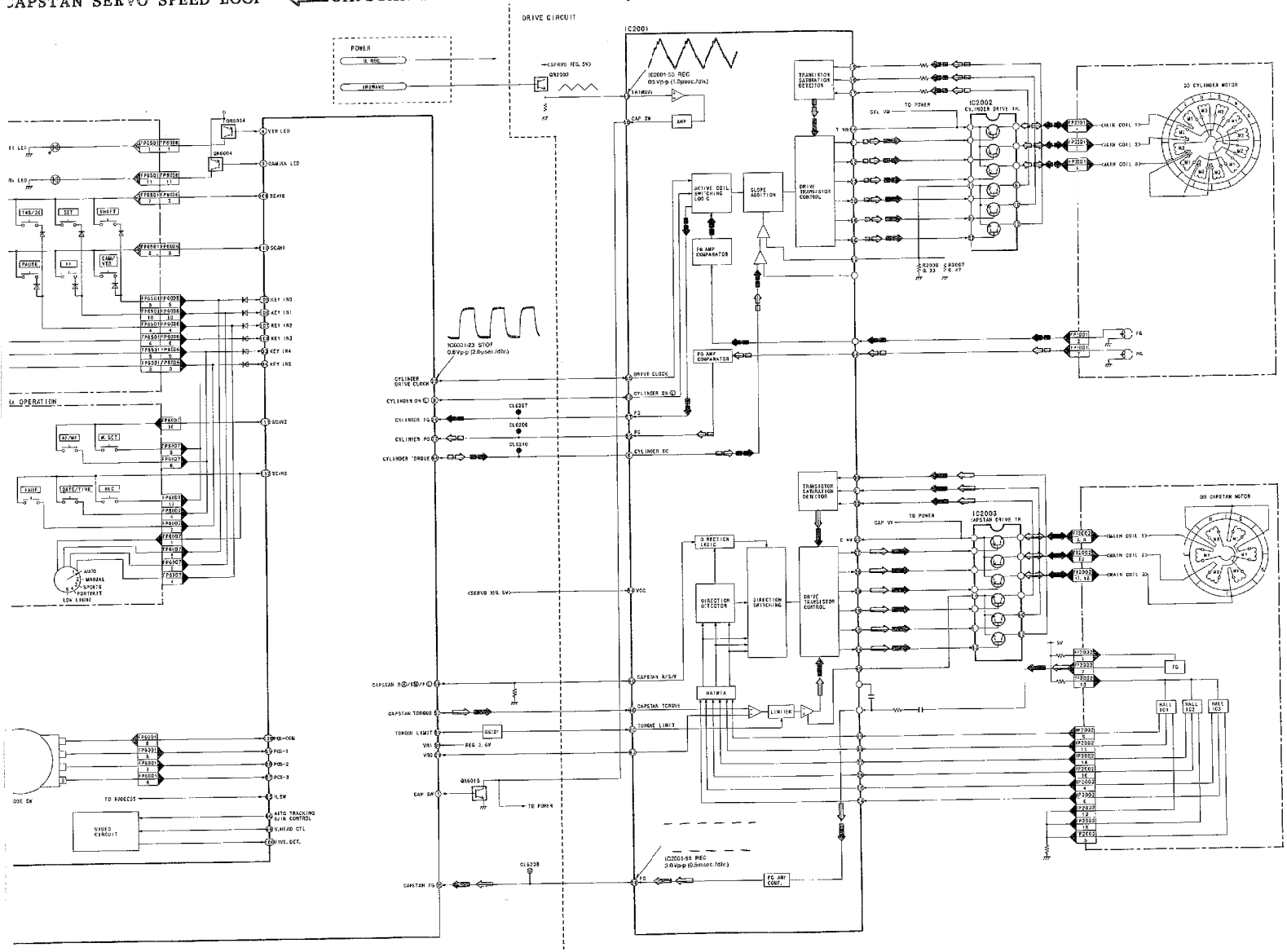


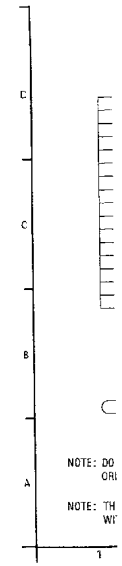
3-7 SYSTEM CONTROL & SERVO BLOCK DIAGRAM

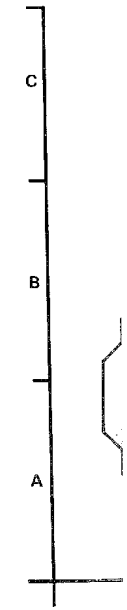


Back Page:
POWER, LUMI/CHRO Section

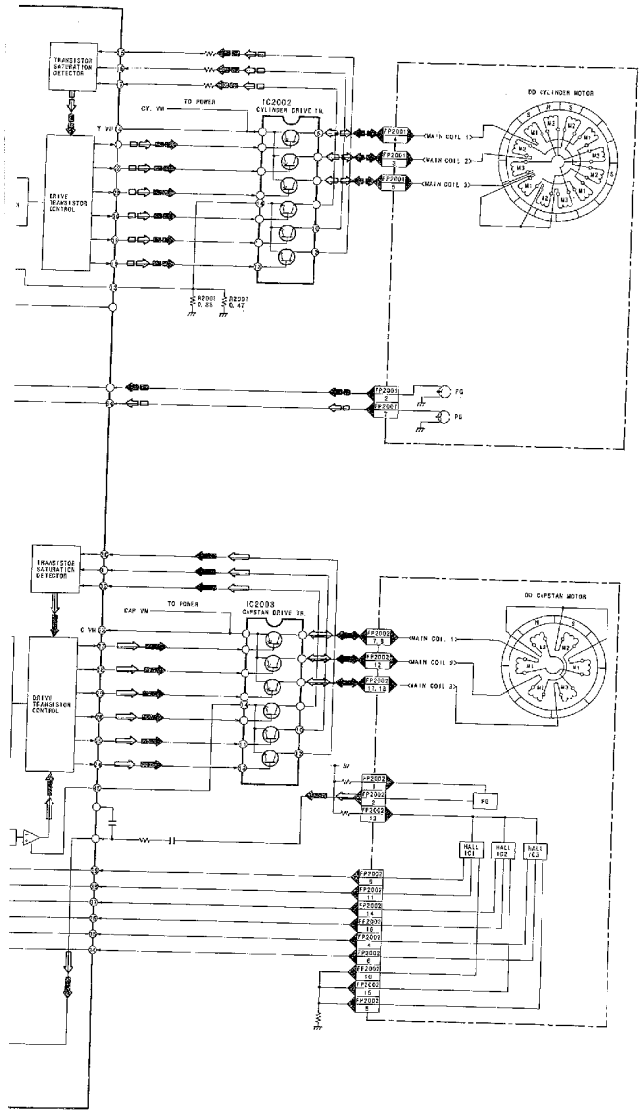
CAPSTAN SERVO SPEED LOOP ⇦ CAPSTAN SERVO PHASE LOOP ⇦ CYLINDER SERVO SPEED LOOP ⇦ CYLINDER SERVO PHASE LOOP



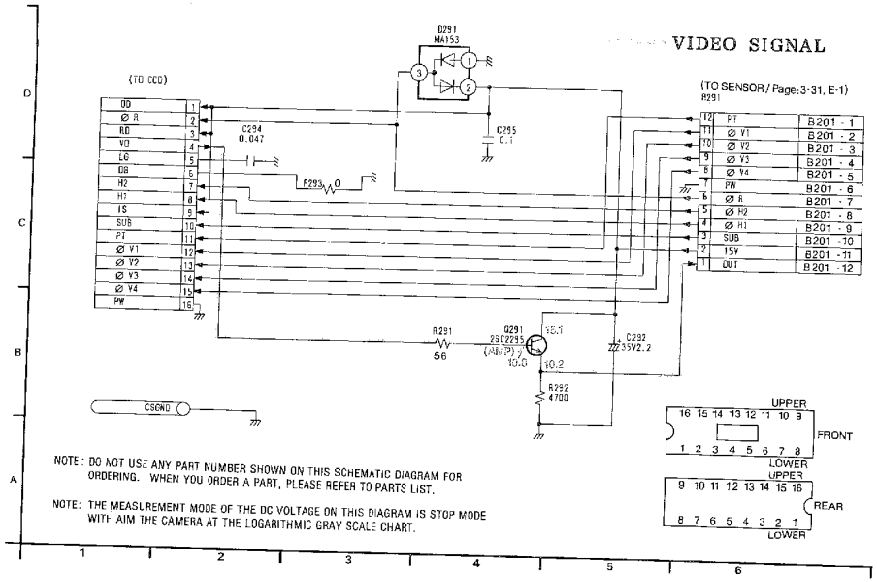




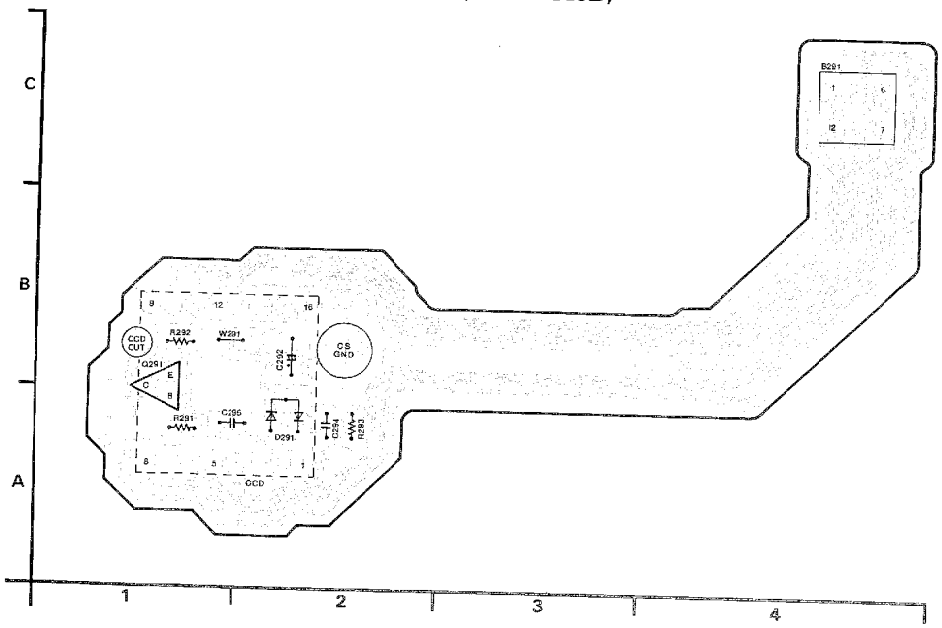
ERVO SPEED LOOP ⇦▭CYLINDER SERVO PHASE LOOP



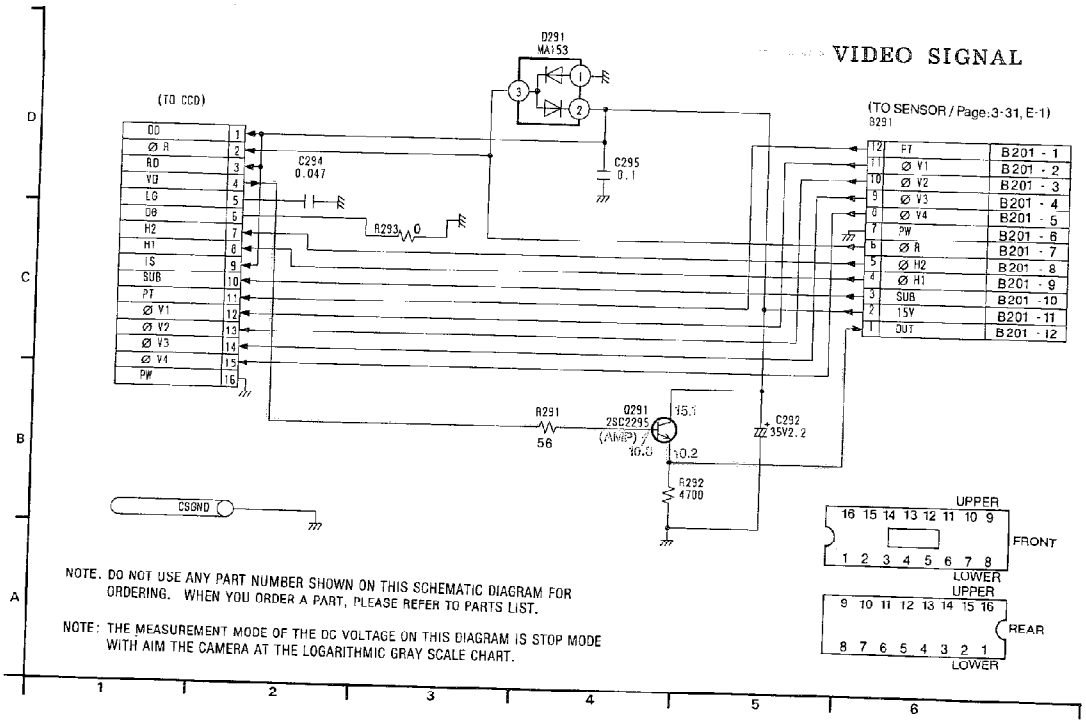
3-8 CCD FLEXIBLE CARD SCHEMATIC DIAGRAM



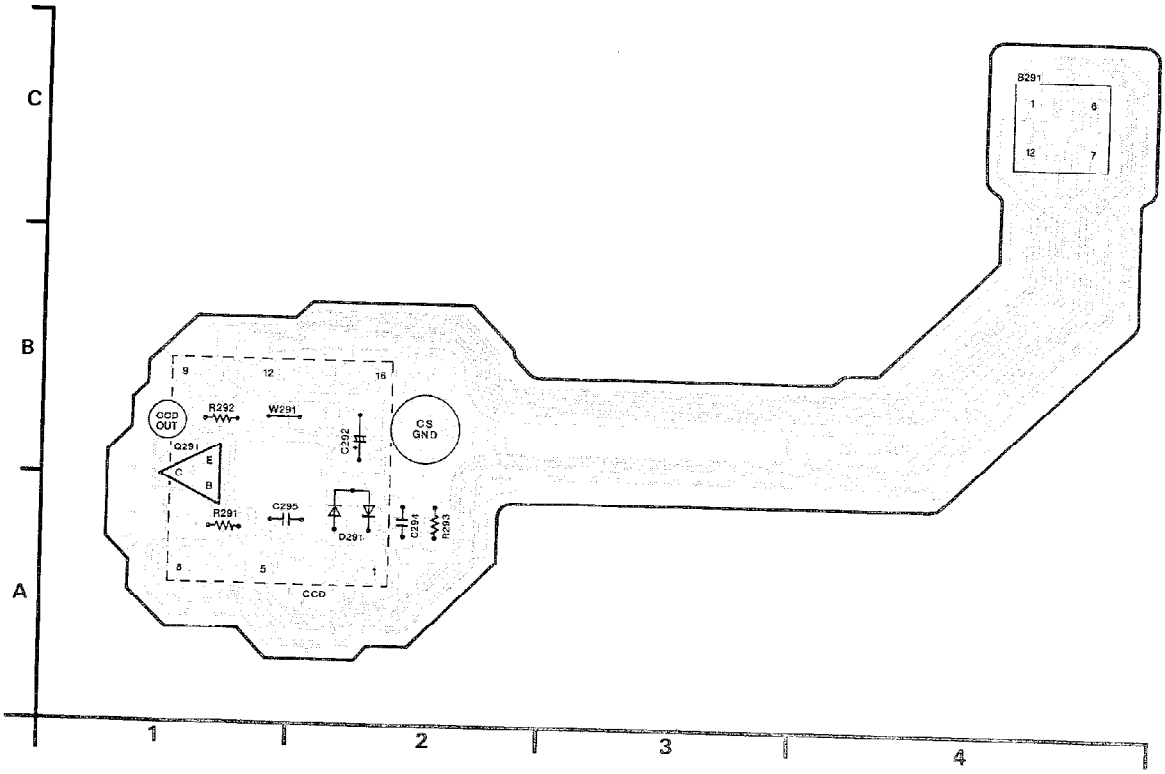
3-9 CCD FLEXIBLE CARD C B A (VEP22140B)

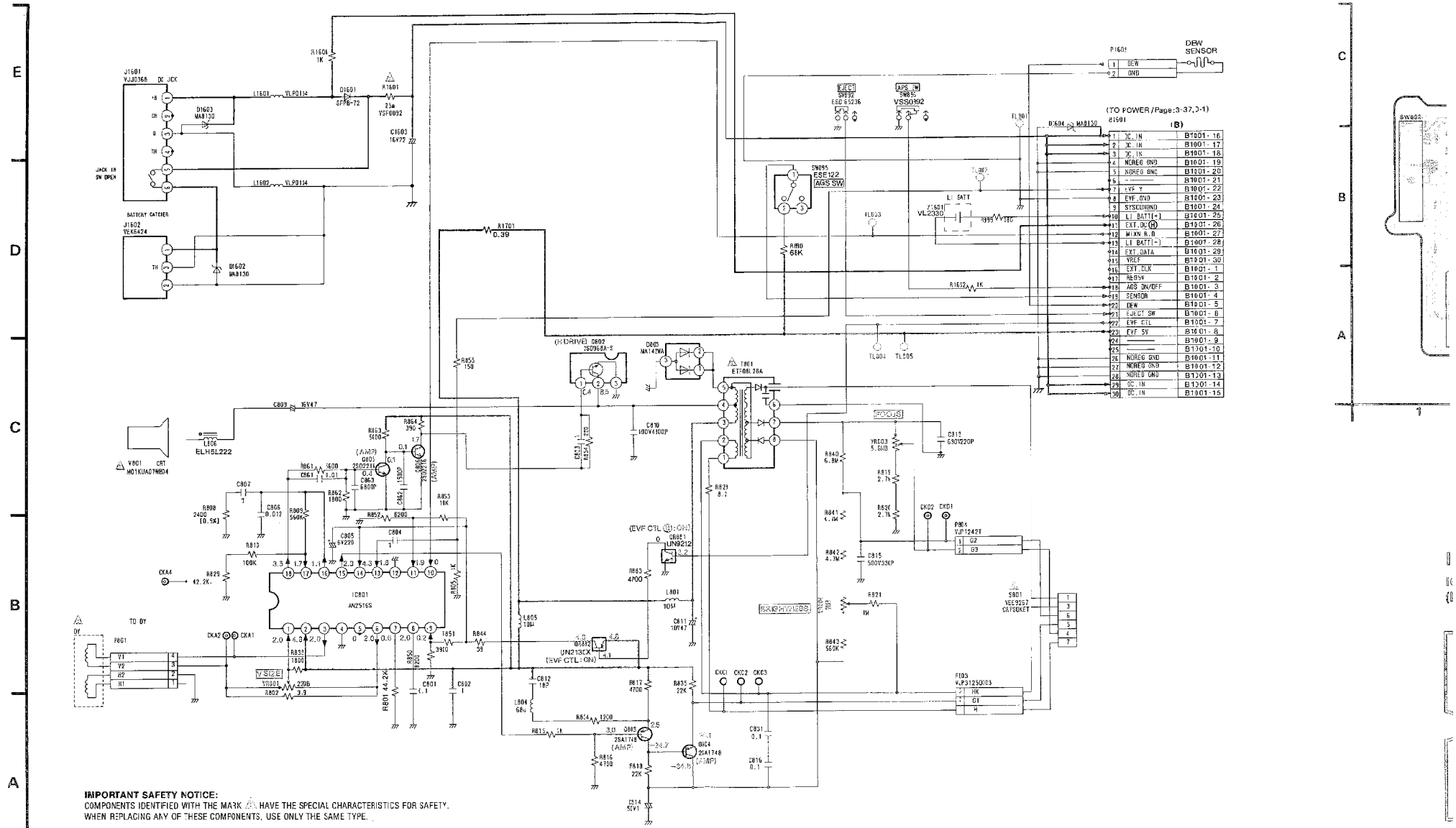


3-8 CCD FLEXIBLE CARD SCHEMATIC DIAGRAM



3-9 CCD FLEXIBLE CARD C B A (VEP22140B)



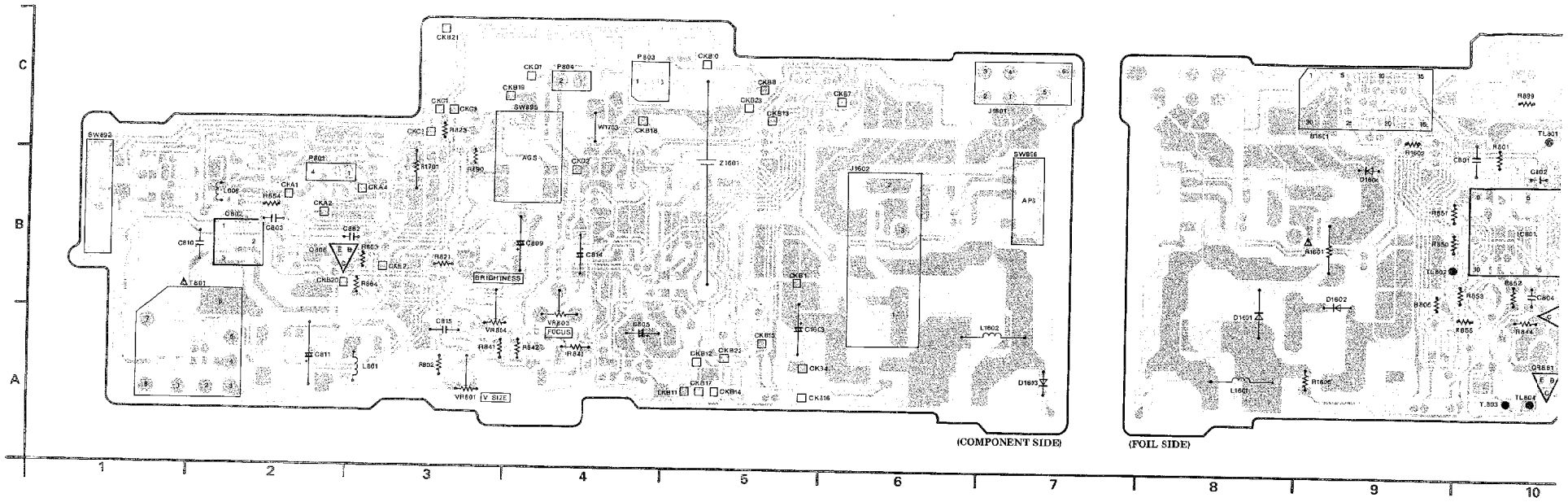


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

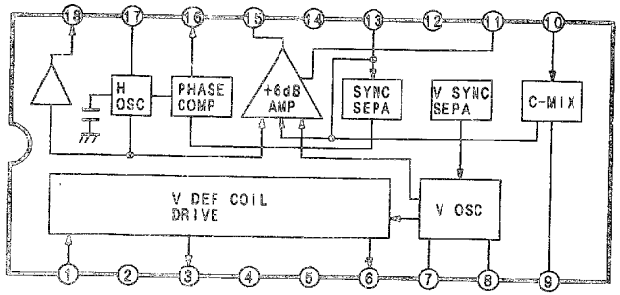
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS RECORD MODE WITH AIM THE CAMERA AT THE COLOUR CHART.

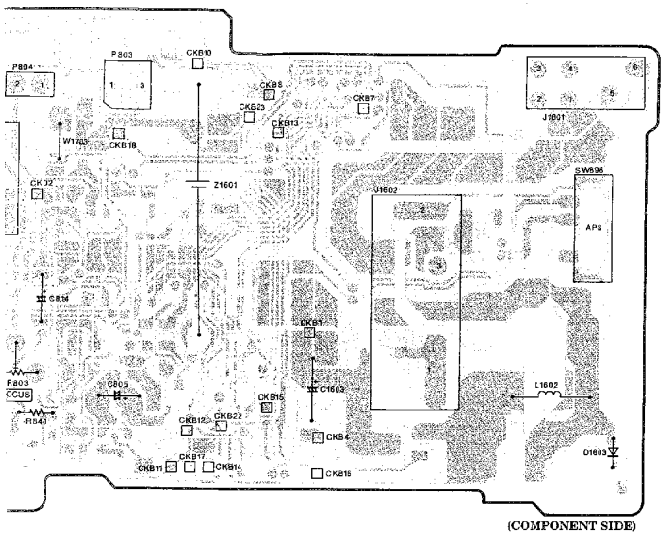
3-11. E V.F C.B.A. (VEP28106A)



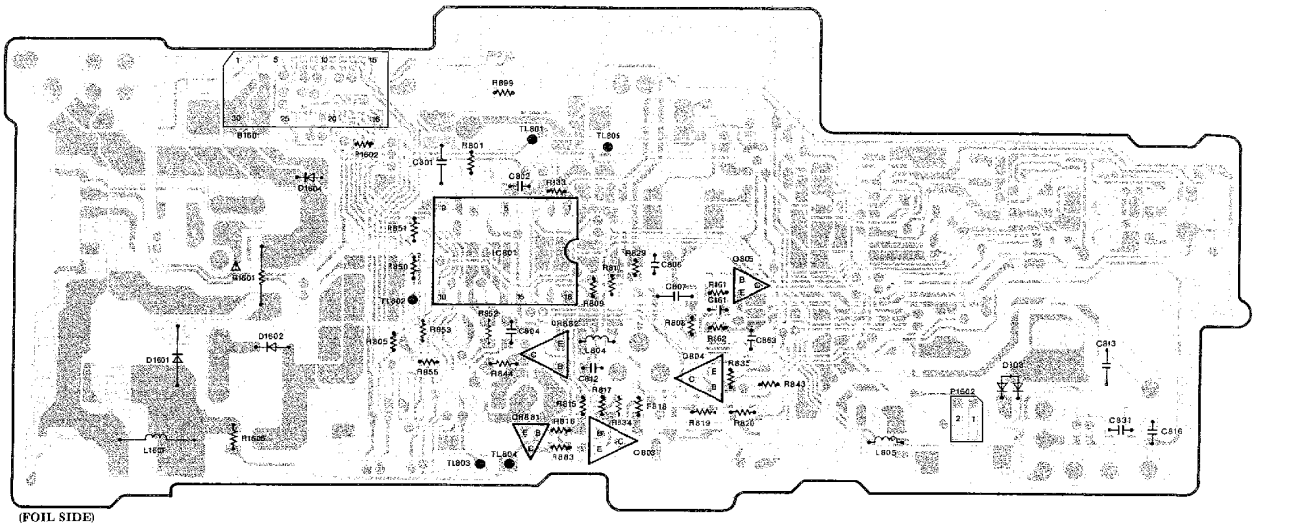
IC BLOCK

IC801 (AN2516S)
(LOCATION: B-2)

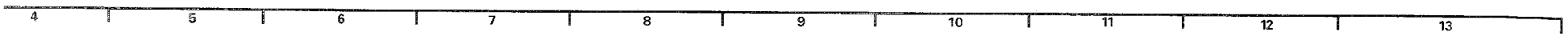




(COMPONENT SIDE)

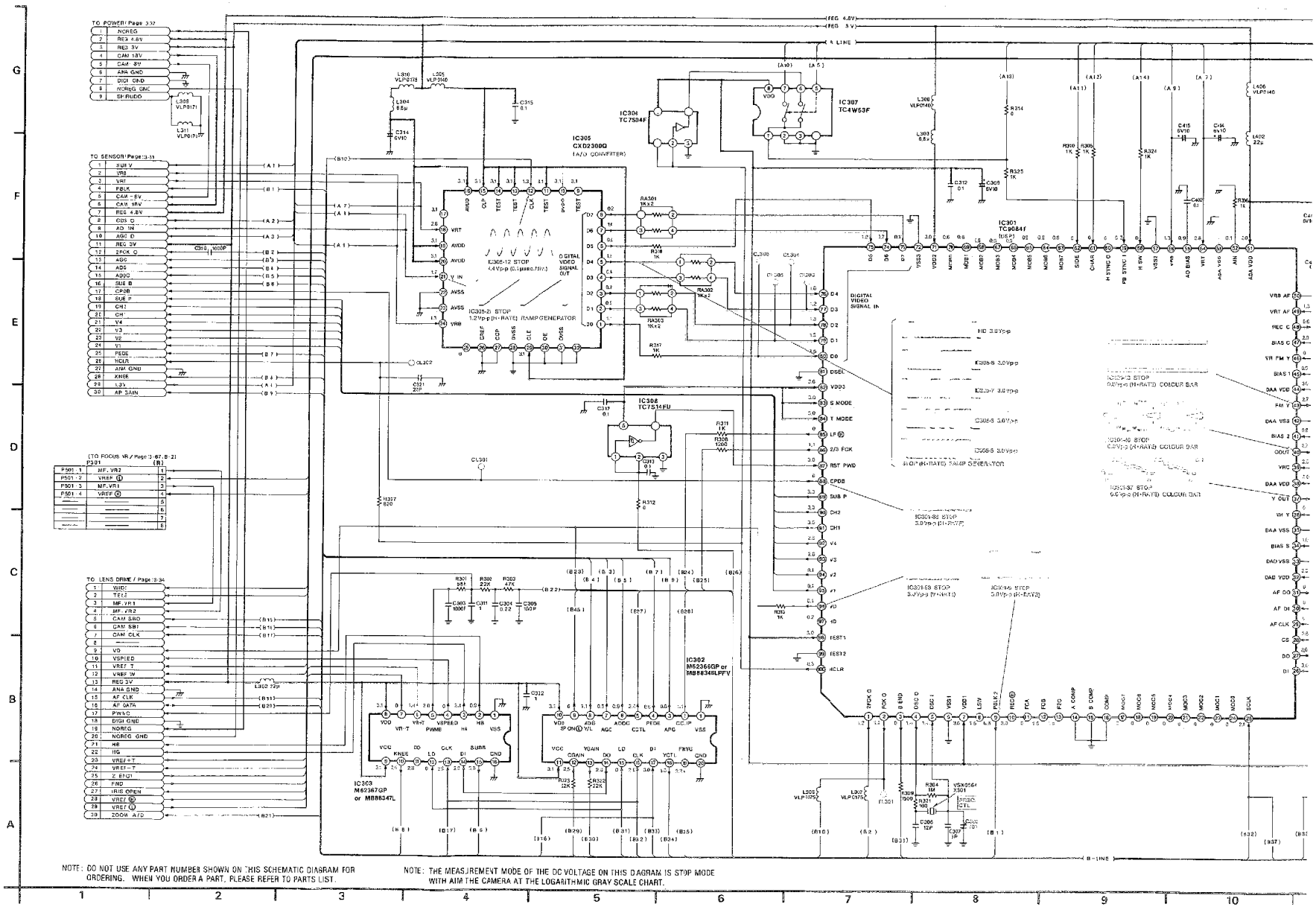


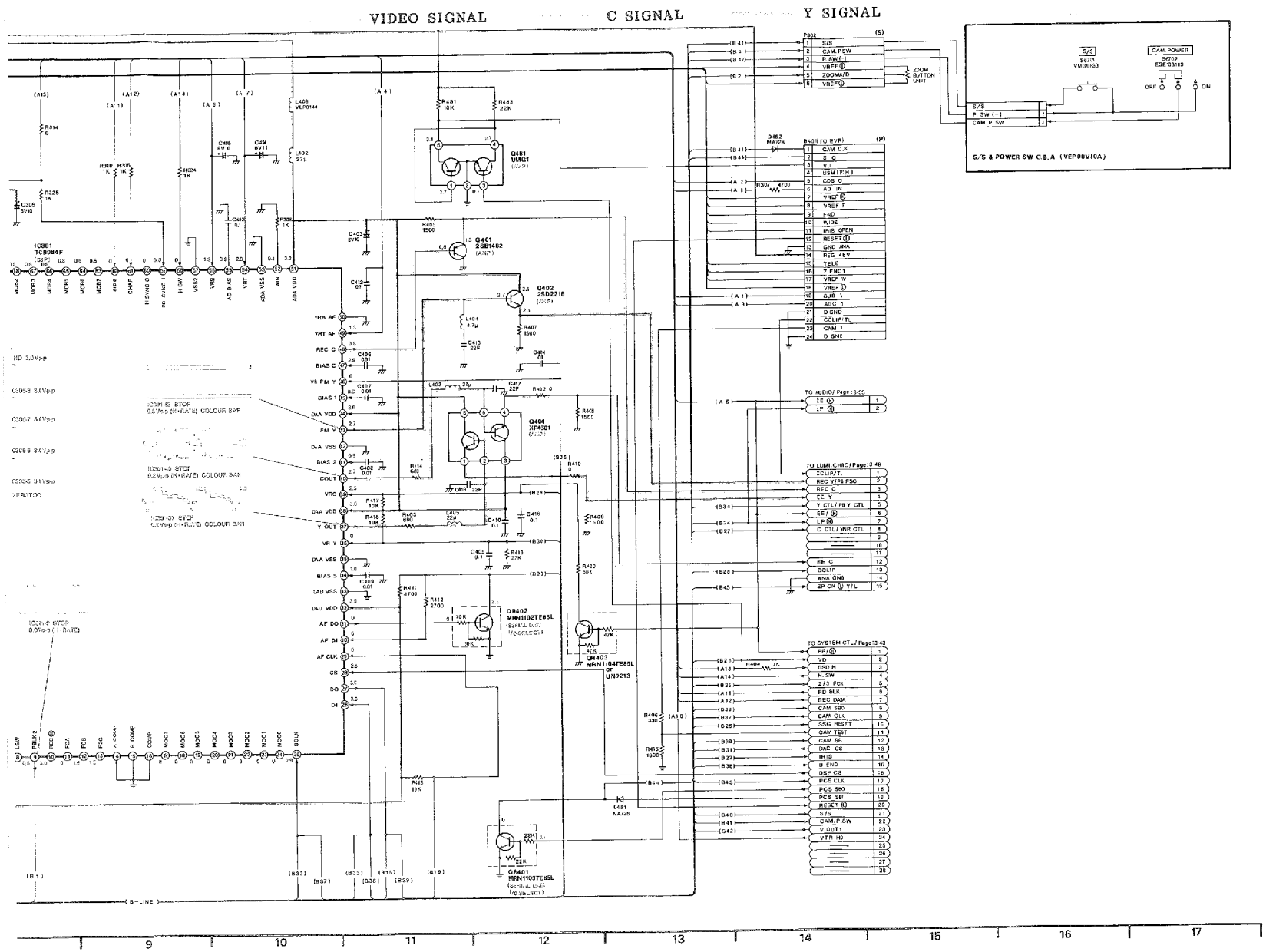
(FOIL SIDE)



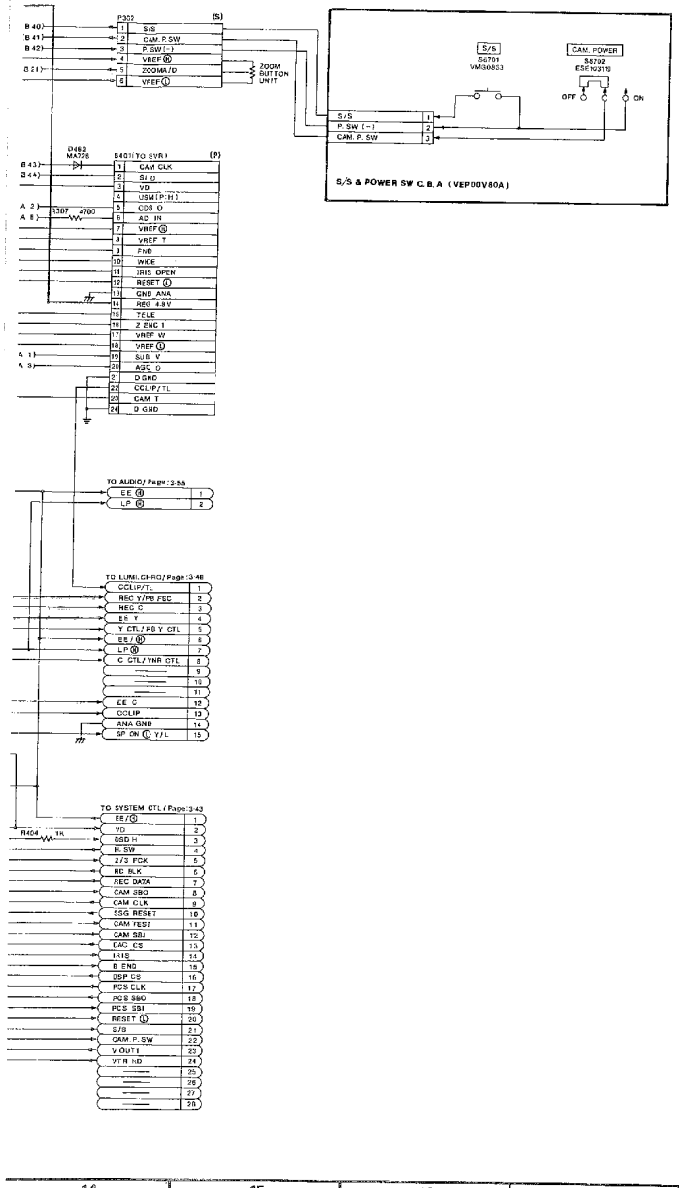
EVF C.B.A.	
Integraied Circuit	
IC801	B-10
Transistor	
Q802	B-2
Q803	A-11
Q804	A-11
Q805	B-11
Q806	B-2
Transistor & Resistor	
QR881	A-10
QR882	B-10
Test Point	
TL801	C-10
TL802	B-9
TL803	A-10
TL804	A-10
TL805	C-10
Adjustment	
VR801	A-3
VR803	A-4
VR804	A-3
Connector	
B1601	C-9
P801	B-2
P803	C-4
P804	C-4
P1602	A-12

ADDRESS INFORMATION


TO POWER / Page 3-32
NOREG
REG 4.8V
REG 3V
CAM 18V
CAM -8V
ANA GND
DIGI GND
NOREG GND
SHIELD
TO SENSOR / Page 3-33
SUB V
VRB
VRT
PBLK
CAM -8V
CAM 18V
REG 4.8V
CDS O
AD IN
AGC O
REG 3V
ZPCK O
AGC
ADG
ADOC
SUB B
CPOB
SUB P
CH2
CH1
V4
V3
V2
V1
PEDE
HCLR
ANA GND
KNEE
L3V
AP GAIN
TO FOCUS VR / Page 3-67, B-21
P301 (B)
P501-1 MF, VR2
P501-2 VREF
P501-3 MF, VR1
P501-4 VREF
TO LENS DRIVE / Page 3-34
WIDE
TELE
MF, VR1
MF, VR2
CAM SRO
CAM SBI
CAM CLK
VD
VSPEED
VREF T
VREF W
REG 3V
ANA GND
AF CLK
AF DATA
PWVC
DIGI GND
NOREG
NOREG GND
HB
HG
VREF+T
VREF-T
Z ENC1
FND
IRIS OPEN
VREF
VREF
ZOOM A/D
IC305 CXD2300Q (A/D CONVERTER)
IC307 TC4W53F
IC304 TC7S04F
IC308 TC7S14FU
IC302 M62366GP or MB86346LPFV
IC303 M62367GP or MB86347L
IC301 TC90B4F
IC305-21 STOP 1.2Vp-p (H-RATE) RAMP GENERATOR
IC305-12 STOP (4Vp-p (Luminance))
DIGITAL VIDEO SIGNAL OUT
DIGITAL VIDEO SIGNAL IN
IC308-8 3.0Vp-p
IC308-7 3.0Vp-p
IC308-6 3.0Vp-p
IC308-5 3.0Vp-p
81.0V (H-RATE) RAMP GENERATOR
IC201-3 STOP 0.525Vp-p (H-RATE) COLOUR BAR
IC201-40 STOP 0.525Vp-p (H-RATE) COLOUR BAR
IC201-37 STOP 0.5Vp-p (H-RATE) COLOUR BAR
IC301-32 STOP 3.0Vp-p (H-RATE)
IC301-33 STOP 3.0Vp-p (H-RATE)
IC301-34 STOP 3.0Vp-p (H-RATE)
B-LINE
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.

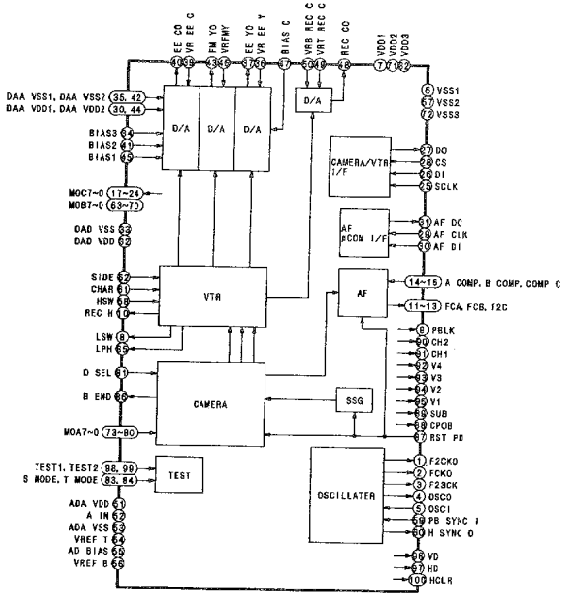

VIDEO SIGNAL
C SIGNAL
Y SIGNAL
IC301
TC9084F
Q401
2SB1462
Q402
2SD2216
Q404
2SA931
QR402
MRN1102TE85L
QR403
MRN1104TE85L
or
UN9213
QR401
MRN1103TE85L
D481
MA728
D482
MA728
S/S & POWER SW C.B.A (VEP00V10A)
S/S
P. SW (-)
CAM. P. SW
CAM. POWER
OFF
ON
TO AUDIO/ Page :3-55
TO LUM. CHRO/ Page :3-48
TO SYSTEM CTL/ Page :3-43
8 - LINE

Y SIGNAL

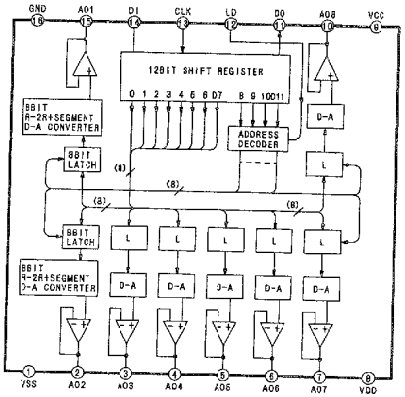


IC BLOCK

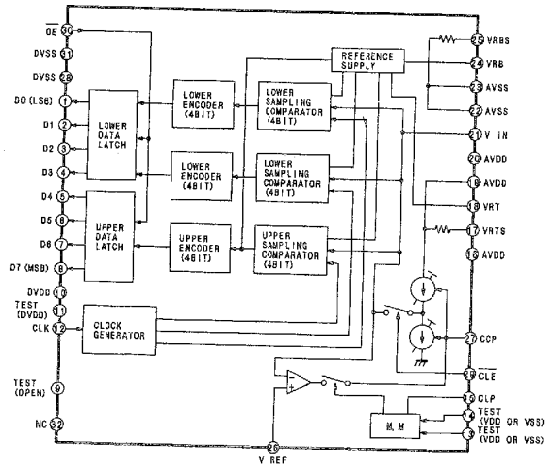
IC301 (TC9084F)
(LOCATION: F-8)



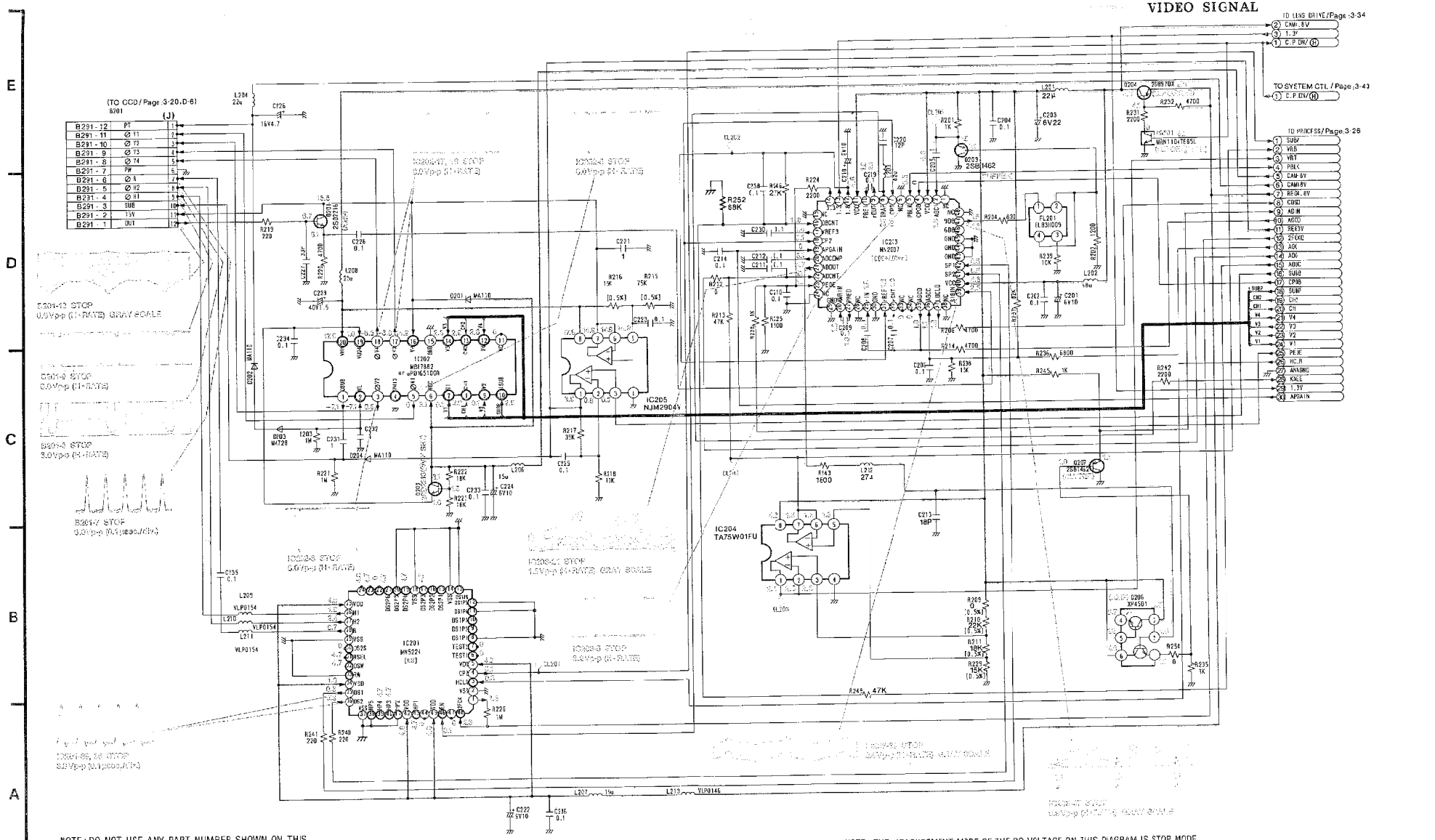
IC303 (M62367GP)
(LOCATION: A-3)



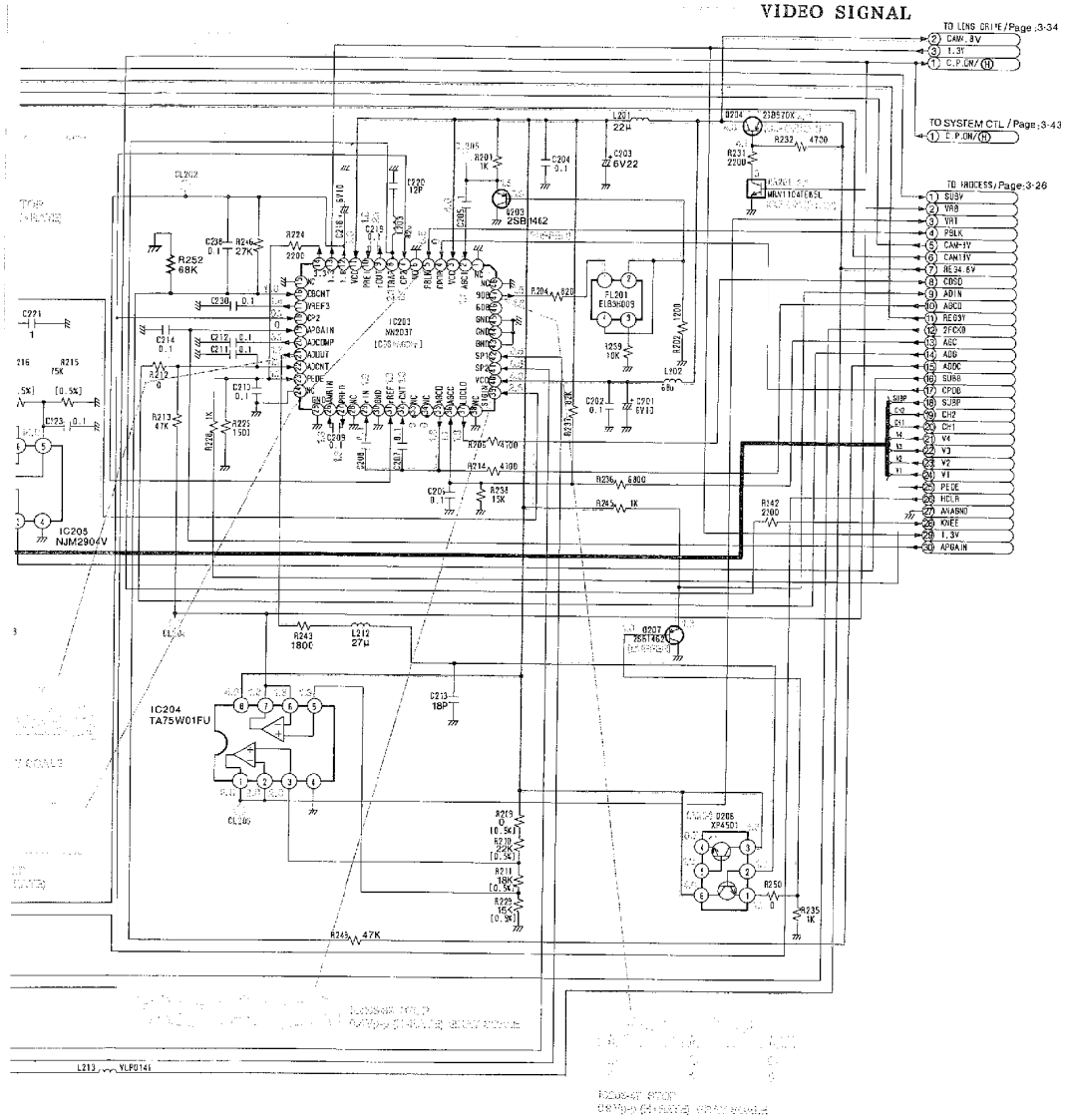
IC305 (CXD2300Q)
(LOCATION: F-5)



3-13 SENSOER SCHEMATIC DIAGRAM


VIDEO SIGNAL
TO LENS DRIVE/Page :3-34
TO SYSTEM CTL / Page :3-43
TO PROCESS/Page:3-26
(TO CCD/Page :3-20,D-6)
IC2D5 NJM2904V
IC204 TA75W01FU
IC201 MN5224
IC202 MB87882 or μPD65100A
IC203 MN2037
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.

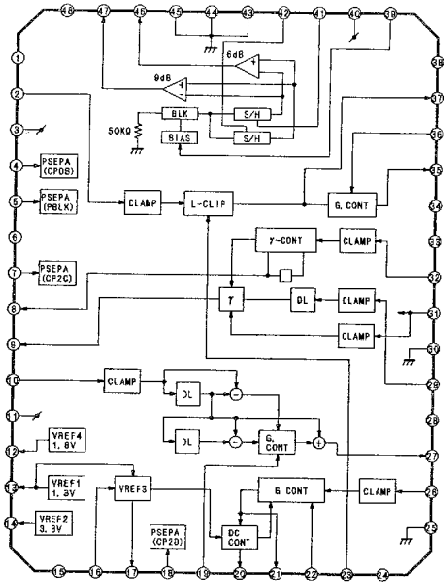
VIDEO SIGNAL



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE
WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.

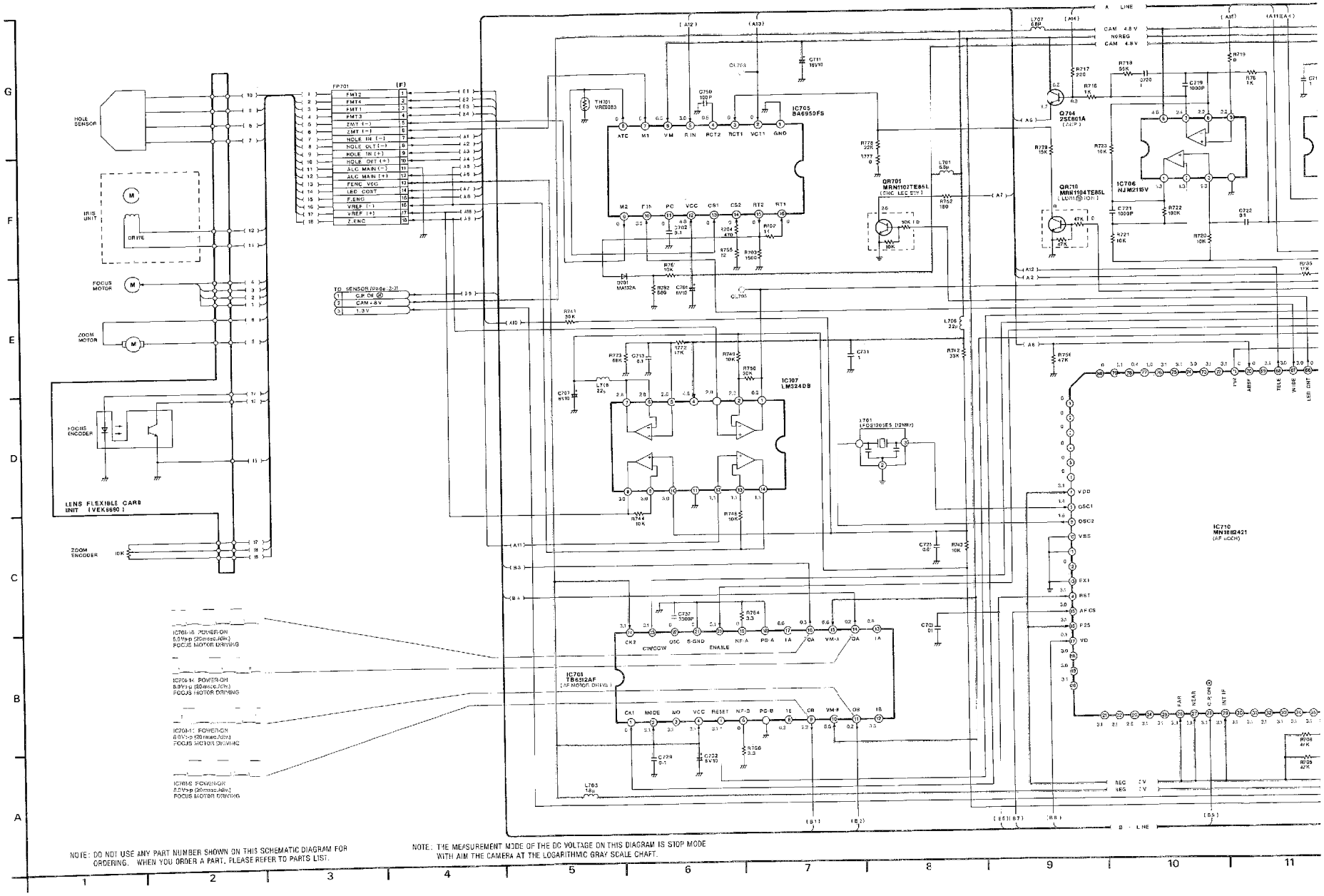
IC BLOCK

IC203 (NN2037)
(LOCATION: D-5)



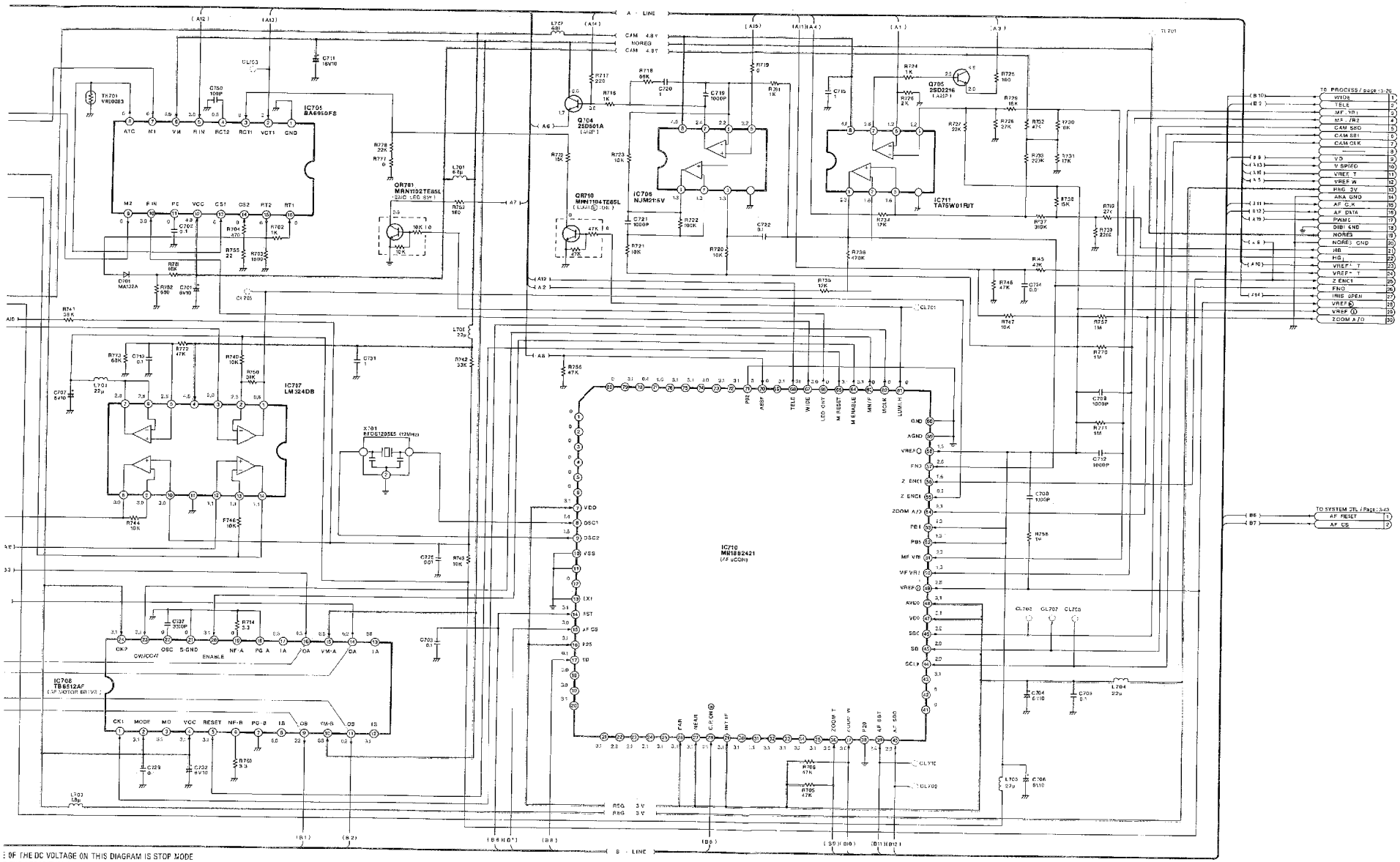
Next Page:
LENS DRIVE Section

3-14 LENS DRIVE SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

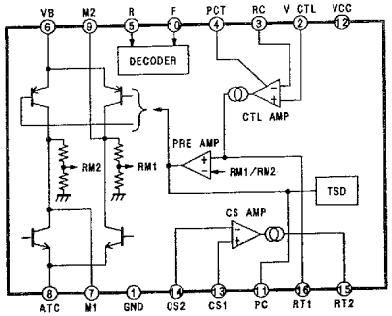
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE WITH AIM THE CAMERA AT THE LOGARITHMIC GRAY SCALE CHART.



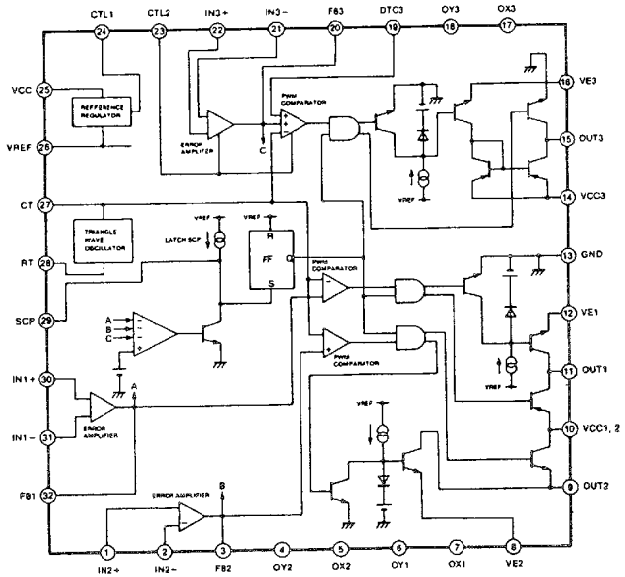
E OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE
T THE LOGARITHMIC GRAY SCALE CHART.

IC BLOCK

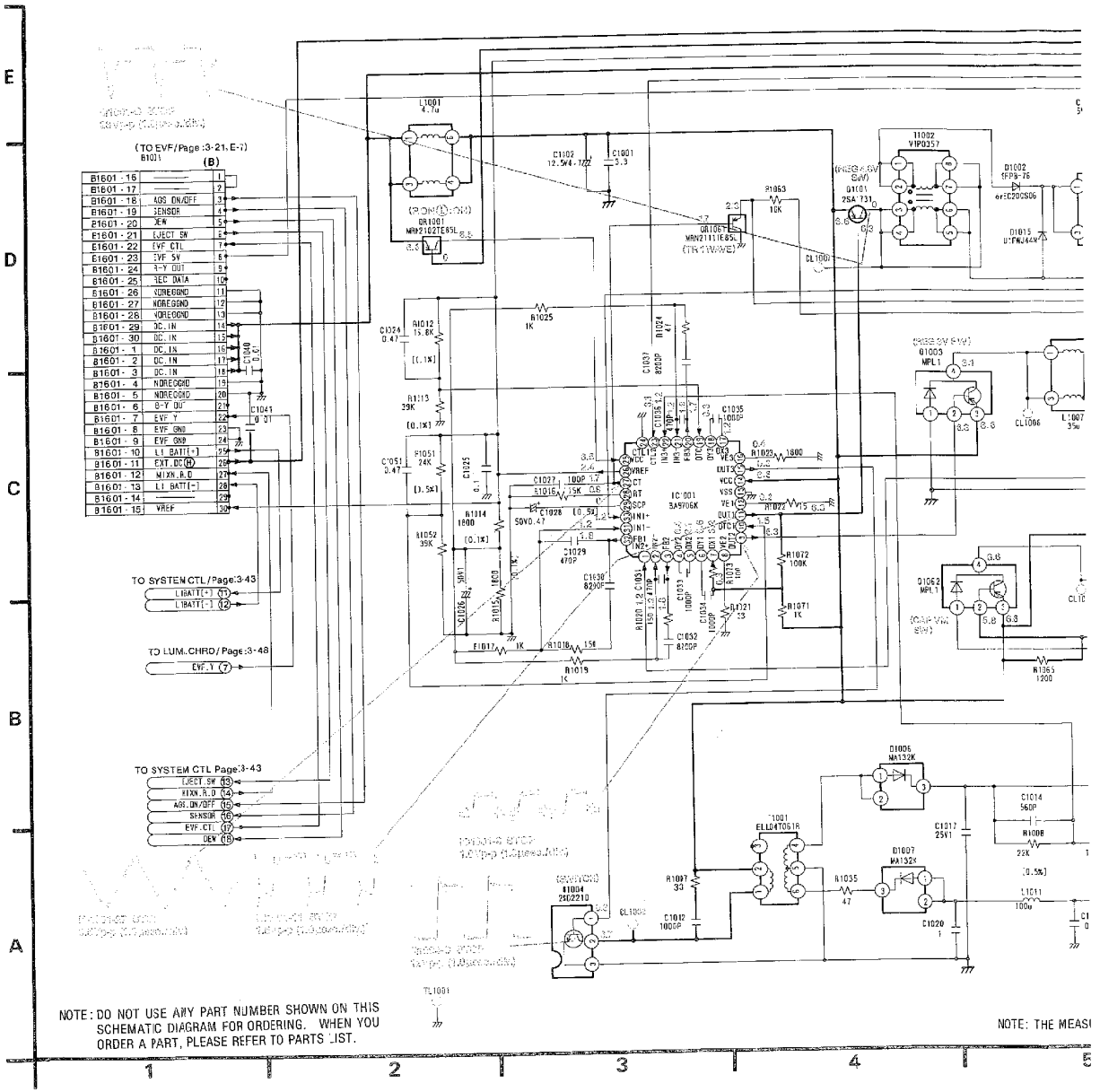
IC705 (BA6950FS)
(LOCATION: F-7)



IC1001 (BA9706K)
(LOCATION: C-3)

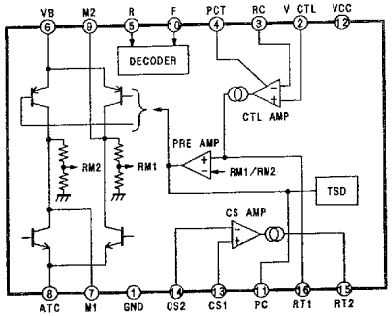


3-15 POWER SCHEMATIC DIAGRAM

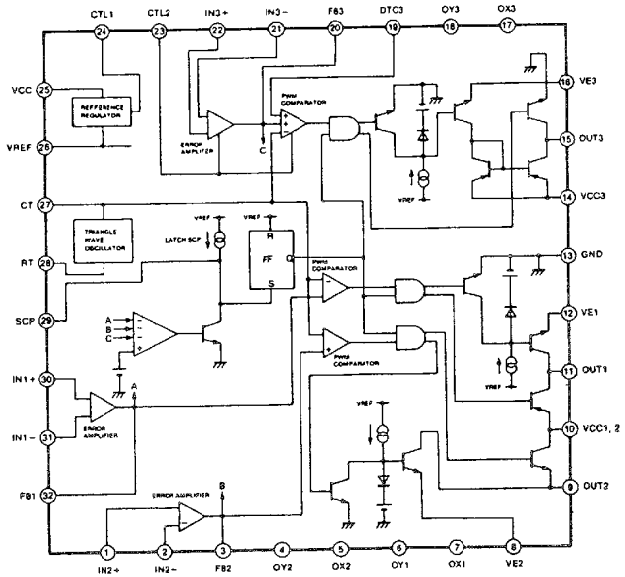


IC BLOCK

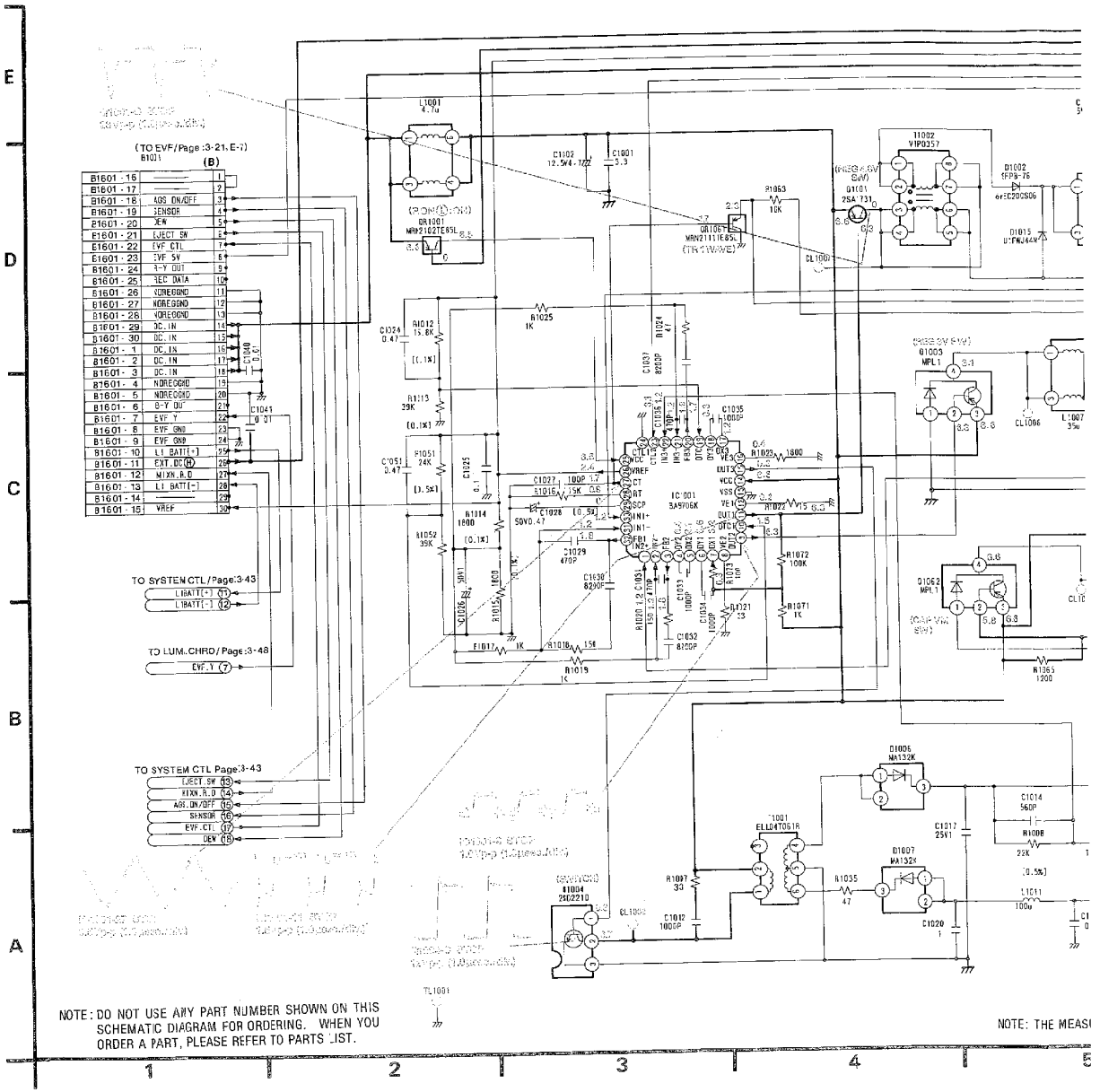
IC705 (BA6950FS)
(LOCATION: F-7)

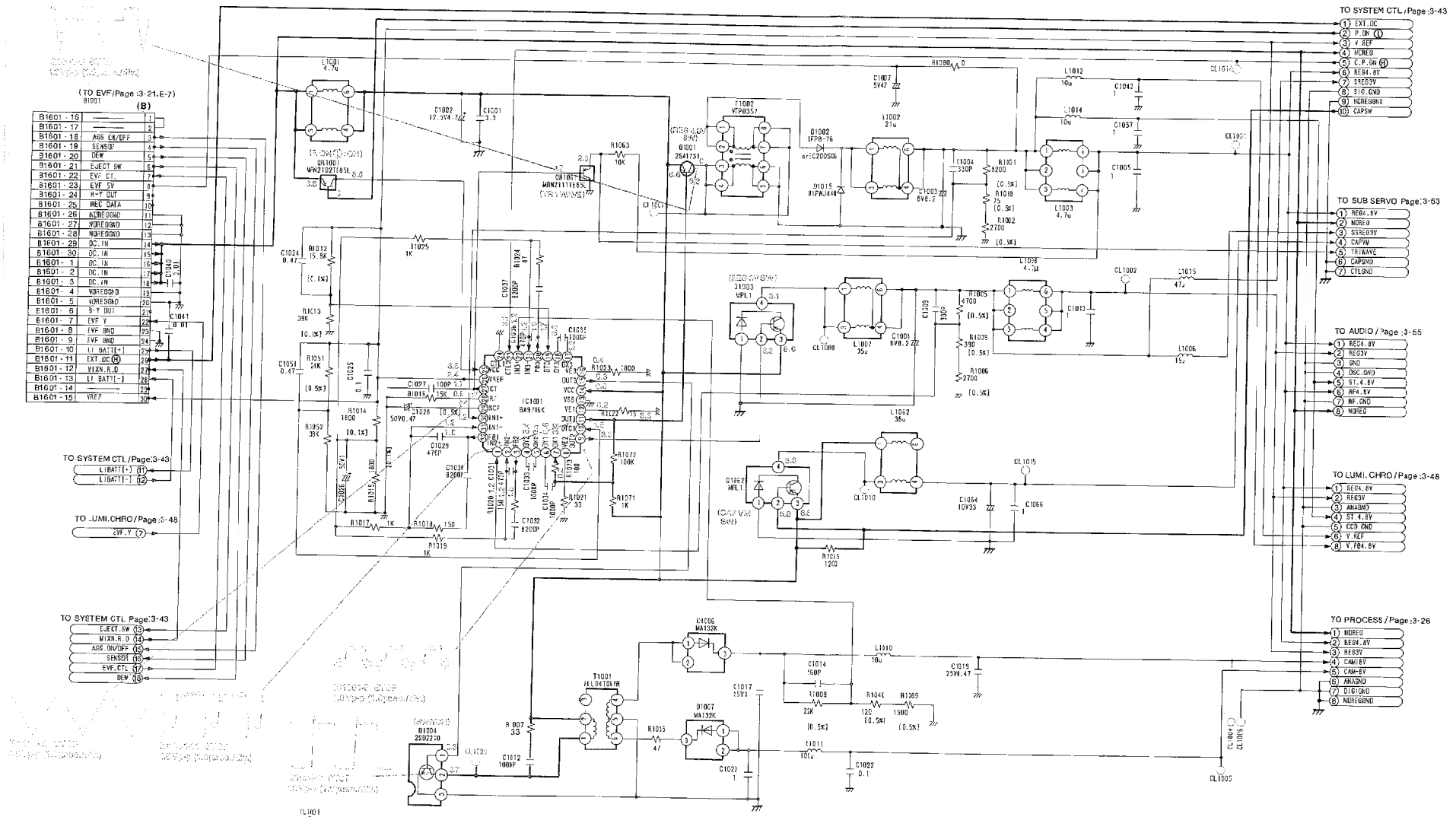


IC1001 (BA9706K)
(LOCATION: C-3)



3-15 POWER SCHEMATIC DIAGRAM





*E: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

1 2 3 4 5 6 7 8

Next Page:
SYSTEM CTL & SERVO Section

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	3.1	0	3.2	0	3.1	3.1	3.1	0	0	3.1	0	3.2	0	0	1.6	2.5	0	0	0
PLAY	0	0	3.2	0	0	3.1	3.1	0	0	3.1	3.1	0	3.2	0	0	1.6	2.3	0	0	0
F.F	0	3.1	3.1	0	3.1	2.3	3.1	3.1	0	0	3.1	0	3.2	0	3.2	1.6	2.8	0	0	0
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	1.6	0	3.1	0	0	0	0	0	3.1	0	3.2	3.2	3.1	0.2	3.0	3.2	1.6	1.6
PLAY	3.2	0	1.6	0	3.1	0	0	0	0	0	3.1	0	3.2	3.2	3.1	0.2	3.0	3.2	1.6	1.6
F.F	0	0	1.6	0	2.6	0	0	0	0	0	2.6	0	3.2	3.2	3.1	0.2	3.0	3.2	1.6	1.6
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	1.5	1.1	0	0	2.4	2.8	0	0	0.5	0	0.5	2.6	2.6	2.8	2.9	2.9	2.9	0	0	0.8
PLAY	1.5	1.0	0	0	2.3	2.8	0	0.1	0.4	0.1	0.1	2.6	2.6	2.8	3.0	3.0	3.0	0	3.1	1.2
F.F	1.5	1.1	0	0	2.3	2.8	0	0	0.3	0	0.3	2.6	2.6	2.8	2.9	2.9	2.9	0	3.1	0.9
REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	1.4	0	3.1	3.1	0	0	1.3	0	0	0	0	0	0.1	1.5	0.1	0	1.6	1.6
PLAY	0	0	1.4	0	3.1	3.1	0	0	1.2	0	0	2.5	1.5	0	1.5	1.6	0.1	0	1.6	1.6
F.F	0	0	1.4	0	3.1	3.1	0	0	1.3	0	0	1.3	1.5	0	1.5	1.6	0.1	0	1.6	1.6
REF. NO.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	1.4	1.7	3.1	0	1.2	1.2	0	0	0	3.0	0	3.2	0.1	1.5	3.2	0	0	3.0	2.4	1.7
PLAY	1.4	1.7	3.1	0	1.2	1.2	0	0	0	3.0	0	3.2	1.3	1.4	3.2	0	0	3.0	2.4	2.6
F.F	1.4	1.7	3.1	0	0.9	0.9	0	0	0	3.0	0	3.2	1.3	1.4	3.2	0	0	3.0	2.4	1.7
REF. NO.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	0	0	0	0	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	2.9	2.5	0	3.1	3.2	0	0	0
PLAY	0	0	0	0	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.0	0	3.2	3.2	0	0	0
F.F	0	0	0	0	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	2.9	2.4	0	3.1	3.2	0	0	0
REF. NO.	IC6001																			
MODE	121	122	123	124	125	126	127	128												
STOP	0	0	3.1	3.1	0	0	3.1	0												
PLAY	0	0	3.1	3.1	0	0	3.2	0												
F.F	0	0	3.1	3.1	0	0	3.1	0												
REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8												
STOP	3.2	3.0	0	6.5	3.2	6.6	3.2	3.3												
PLAY	3.2	3.0	0	6.5	3.2	6.6	3.2	3.3												
F.F	3.2	3.0	0	6.4	3.2	6.5	3.2	3.3												
REF. NO.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.7	2.9	2.7	3.0	3.0	0	1.3	1.3	0	0	0	0	0	0	0.1	0	0	0	2.9	2.6
PLAY	2.8	2.9	0	3.1	3.0	0	0	1.3	0	0	0	0	0	0	0	0	0	0	3.0	3.0
F.F	2.7	2.9	2.7	3.0	3.0	0	1.3	1.3	0	0	0	0	0	0	0.1	0	0	0	2.9	2.6

REF. NO.	IC6004									IC6005								
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	
STOP	3.1	3.0	3.0	2.9	2.9	2.9	0	0		0.3	6.6	4.8	0	0	3.0	0	0	
PLAY	3.1	3.0	3.0	3.0	3.0	3.0	0	0		0.4	6.6	4.8	0	0	3.0	0.2	0	
F.F	3.1	3.0	2.9	2.9	2.9	2.9	0	0		0.6	6.5	4.8	0	0	3.0	0.2	0	
REF. NO.	IC6006									IC6007								
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	
STOP	0	0.8	0.7	0	0	0	0	3.0		0.1	0	0	0	2.7	0.1	0	3.0	
PLAY	1.5	0.7	0.7	0	0	0	0	3.0		0	0	0	0	2.9	0	0	3.0	
F.F	1.5	0.7	0.7	0	3.0	0	0	0		0.1	0	0	0	0	0.1	0	0	

REF. NO.	IC6008																			
MODE	1	2	3	4	5	6	7	8												
STOP	3.2	3.0	0	6.5	0	6.6	3.2	3.3												
PLAY	0	3.0	3.0	0	0	0.2	3.0	3.0												
F.F	0.1	3.0	3.0	0	0	1.0	3.0	3.0												

SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q6002			Q6004			Q6005						Q6006			Q6007		
MODE	E	C	B	E	C	B	1	2	3	4	5	6	E	C	B	E	C	B
STOP	0.1	6.6	0	3.1	0	3.0	0	2.8	0.1	4.6	0.1	4.4	0	6.6	6.0	6.6	6.5	5.8
PLAY	0.1	6.6	0	3.1	0	3.0	0	2.2	0.2	4.6	0.1	4.4	6.6	6.6	6.0	6.6	6.5	5.9
F.F	1.0	6.5	1.0	3.1	0	3.0	0	2.7	0.2	4.7	0.1	4.5	6.6	6.6	6.0	6.5	6.5	5.8

REF. NO.	Q6201		
MODE	E	C	B
STOP	0	0.3	0
PLAY	3.1	3.1	2.6
F.F	3.1	3.1	2.6

REF. NO.	QR6002						QR6003			QR6004						QR6005		
MODE	1	2	3	4	5	6	E	C	B	1	2	3	4	5	6	E	C	B
STOP	0	0	0	0	3.1	6.5	3.0	0	3.2	3.0	0	0	3.0	3.2	3.0	0	0	3.2
PLAY	0	0	0	0	3.1	6.5	3.0	0	3.2	3.0	3.2	0	0	0	0	0	0	3.2
F.F	0	0	0	0	3.1	6.4	3.0	1.0	2.5	3.0	3.2	3.0	3.0	0	0	0	0	3.2

REF. NO.	QR6006			QR6007			QR6010						QR6014			QR6015		
MODE	E	C	B	E	C	B	1	2	3	4	5		E	C	B	E	C	B
STOP	0	0	3.2	0	0	3.1	2.7	0	2.7	0.2	0.1		0	0	5.5	0	5.8	0
PLAY	0	0	3.2	0	0	3.1	2.7	0	2.7	0.2	0.1		0	0	5.5	0	6.3	0
F.F	0	0	3.2	0	0	3.1	2.7	0	2.7	0.2	0.1		0	0	5.4	0	6.0	0

SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q6002			Q6004			Q6005						Q6006			Q6007		
MODE	E	C	B	E	C	B	1	2	3	4	5	6	E	C	B	E	C	B
STOP	0.1	6.6	0	3.1	0	3.0	0	2.3	0.1	4.6	0.1	4.4	0	6.6	6.0	6.6	6.5	5.8
PLAY	0.1	6.6	0	3.1	0	3.0	0	2.2	0.2	4.6	0.1	4.4	6.6	6.6	6.0	6.6	6.5	5.9
F.F	1.0	6.5	1.0	3.1	0	3.0	0	2.7	0.2	4.7	0.1	4.5	6.6	6.6	6.0	6.5	6.5	5.8

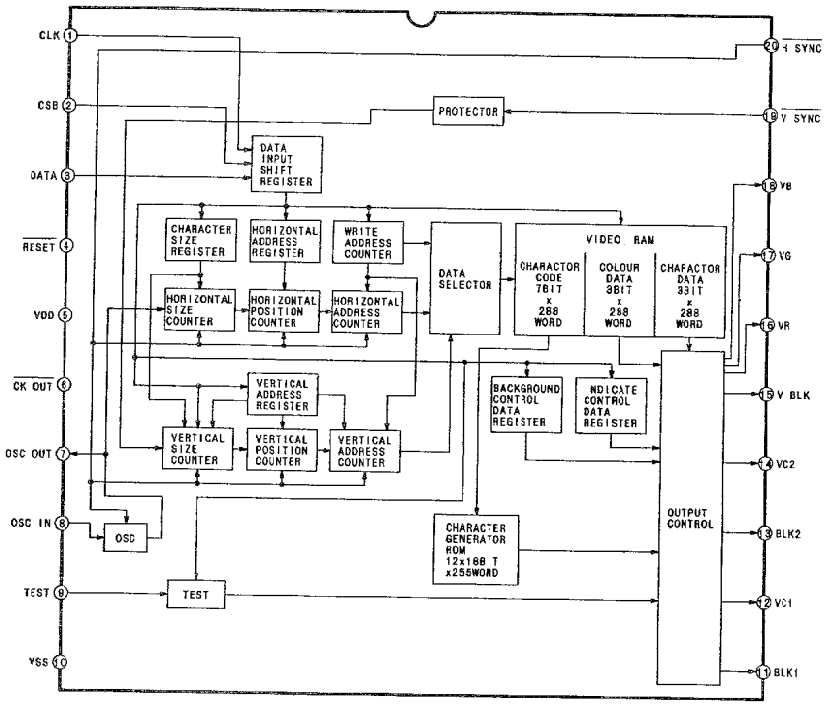
REF. NO.	Q6201		
MODE	E	C	B
STOP	0	0.3	0
PLAY	3.1	3.1	2.6
F.F	3.1	3.1	2.6

REF. NC.	QR6002						QR6003			QR6004						QR6005		
MODE	1	2	3	4	5	6	E	C	B	1	2	3	4	5	6	E	C	B
STOP	0	0	0	0	3.1	6.5	3.0	0	3.2	3.0	0	0	3.0	3.2	3.0	0	0	3.2
PLAY	0	0	0	0	3.1	6.5	3.0	0	3.2	3.0	3.2	0	0	0	0	0	0	3.2
F.F	0	0	0	0	3.1	6.4	3.0	1.0	2.5	3.0	3.2	3.0	3.0	0	0	0	0	3.2

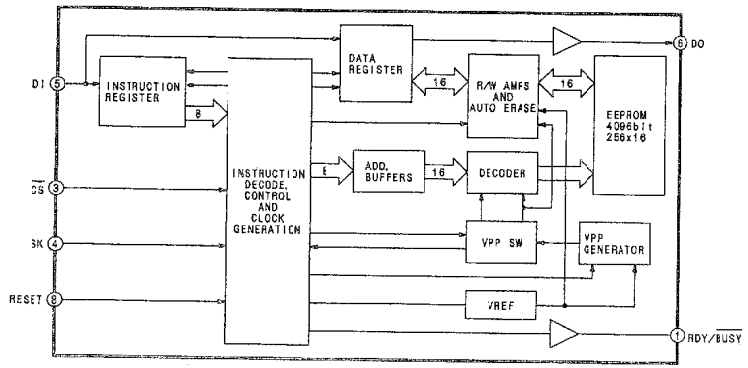
REF. NO.	QR6006			QR6007			QR6010					QR6014			QR6015		
MODE	E	C	B	E	C	B	1	2	3	4	5	E	C	B	E	C	B
STOP	0	C	3.2	0	0	3.1	2.7	0	2.7	0.2	0.1	0	0	5.5	0	5.8	0
PLAY	0	0	3.2	0	0	3.1	2.7	0	2.7	0.2	0.1	0	0	5.5	0	6.3	C
F.F	0	0	3.2	0	0	3.1	2.7	0	2.7	0.2	0.1	0	0	5.4	0	6.0	C

IC BLOCK

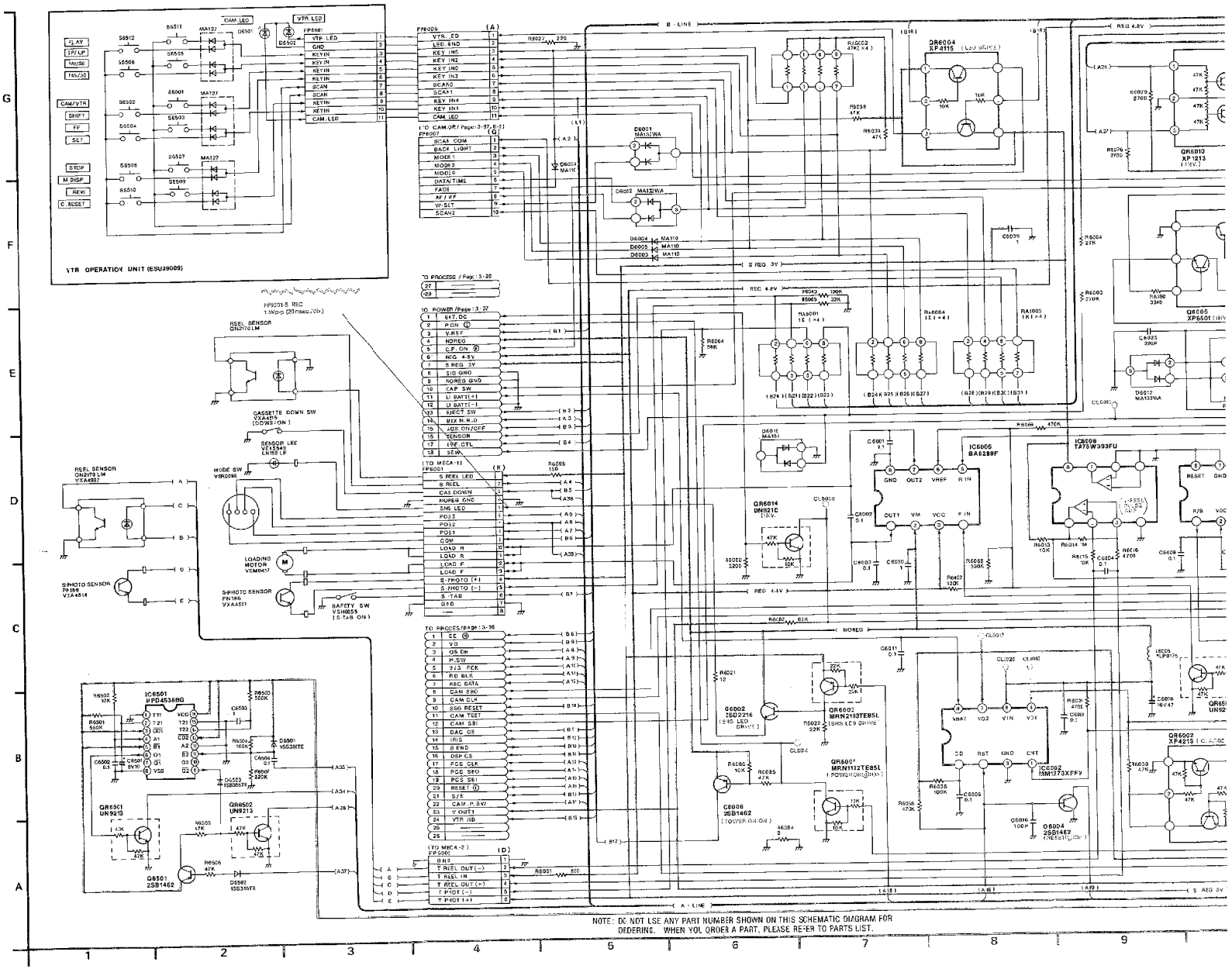
IC6003 (BU6140FV)
(LOCATION: C-20)

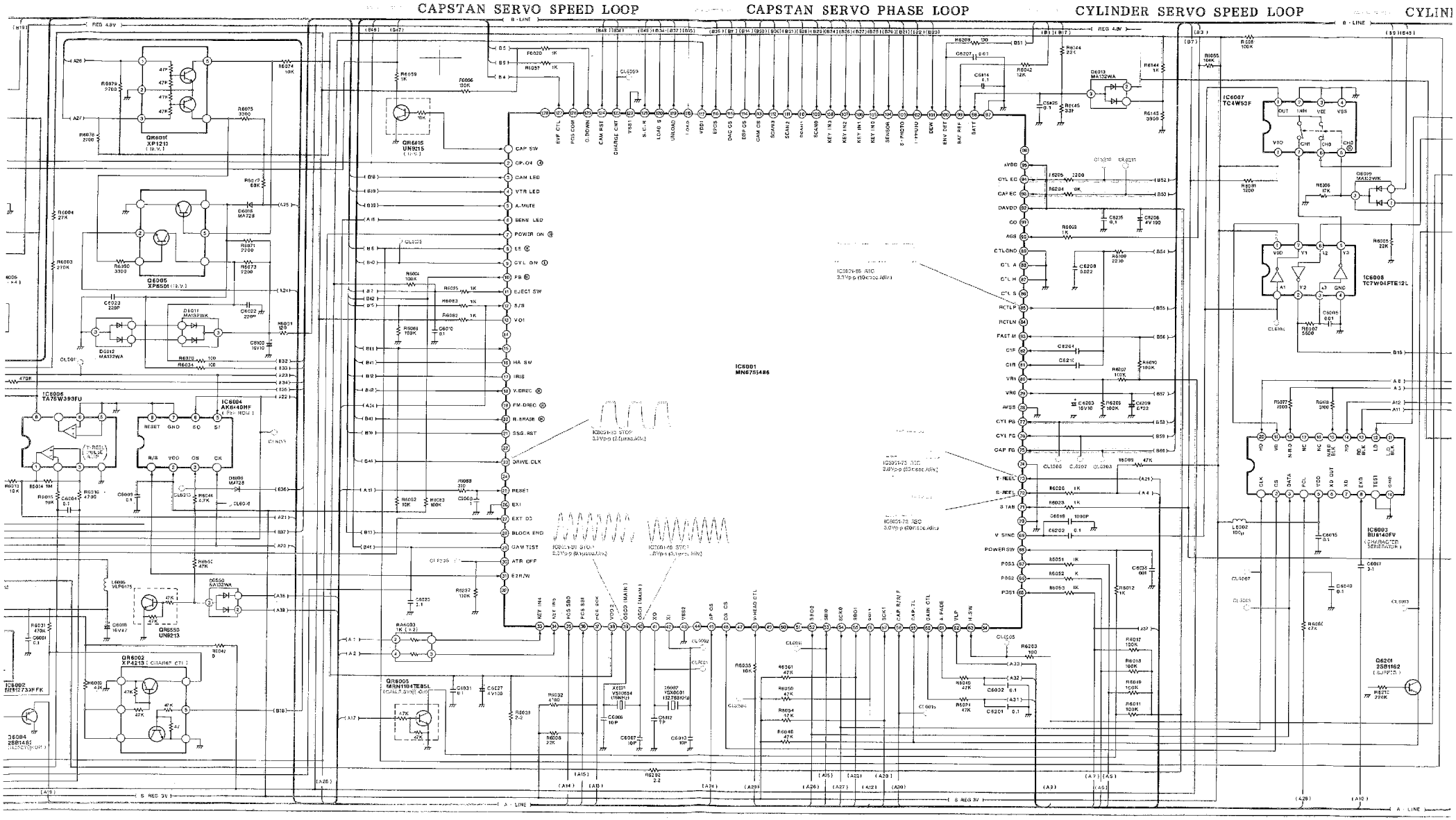


IC6004 (AK6440HF)
(LOCATION: D-10)

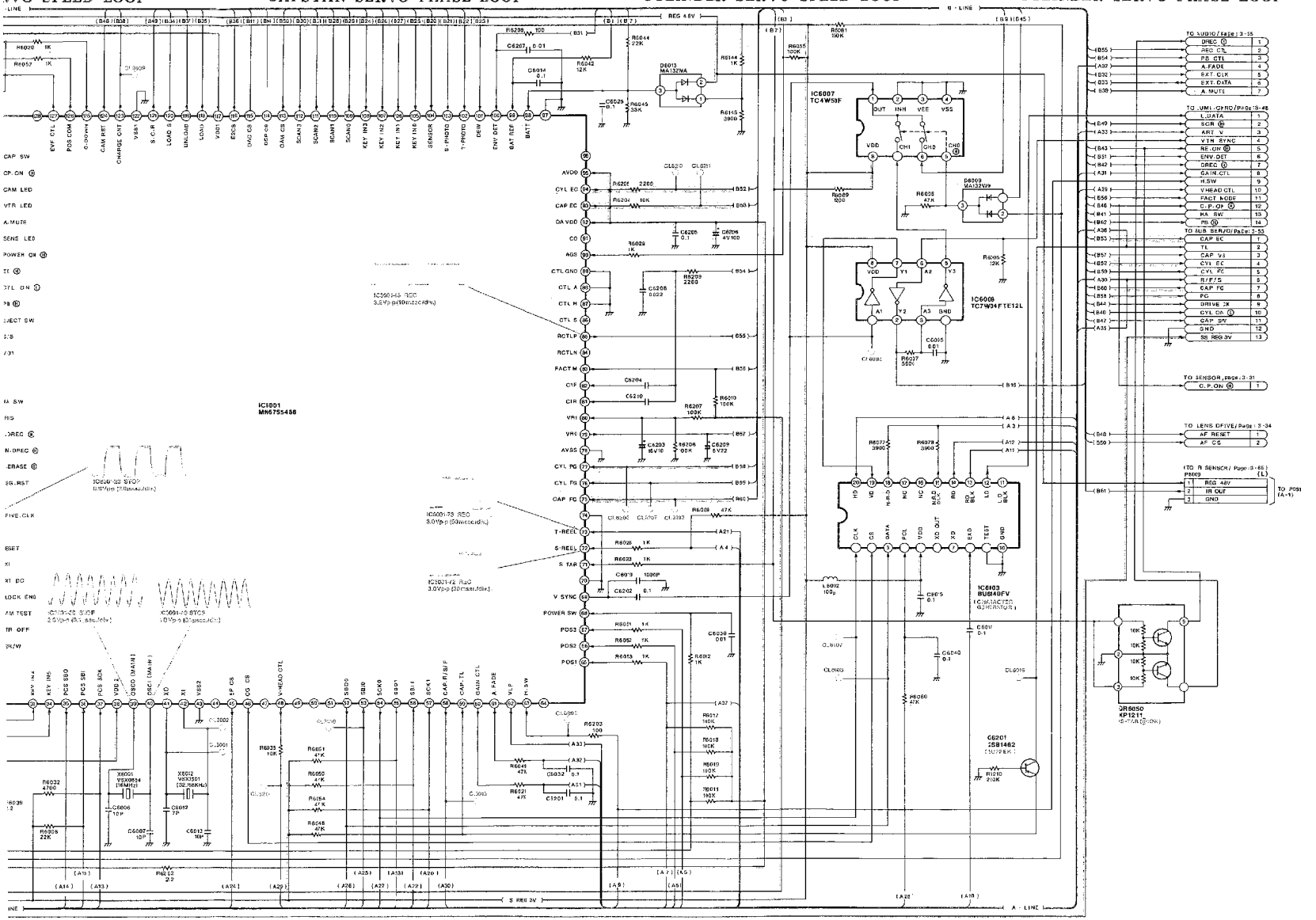


3-16 SYSTEM CONTROL & SERVO SCHEMATIC DIAGRAM

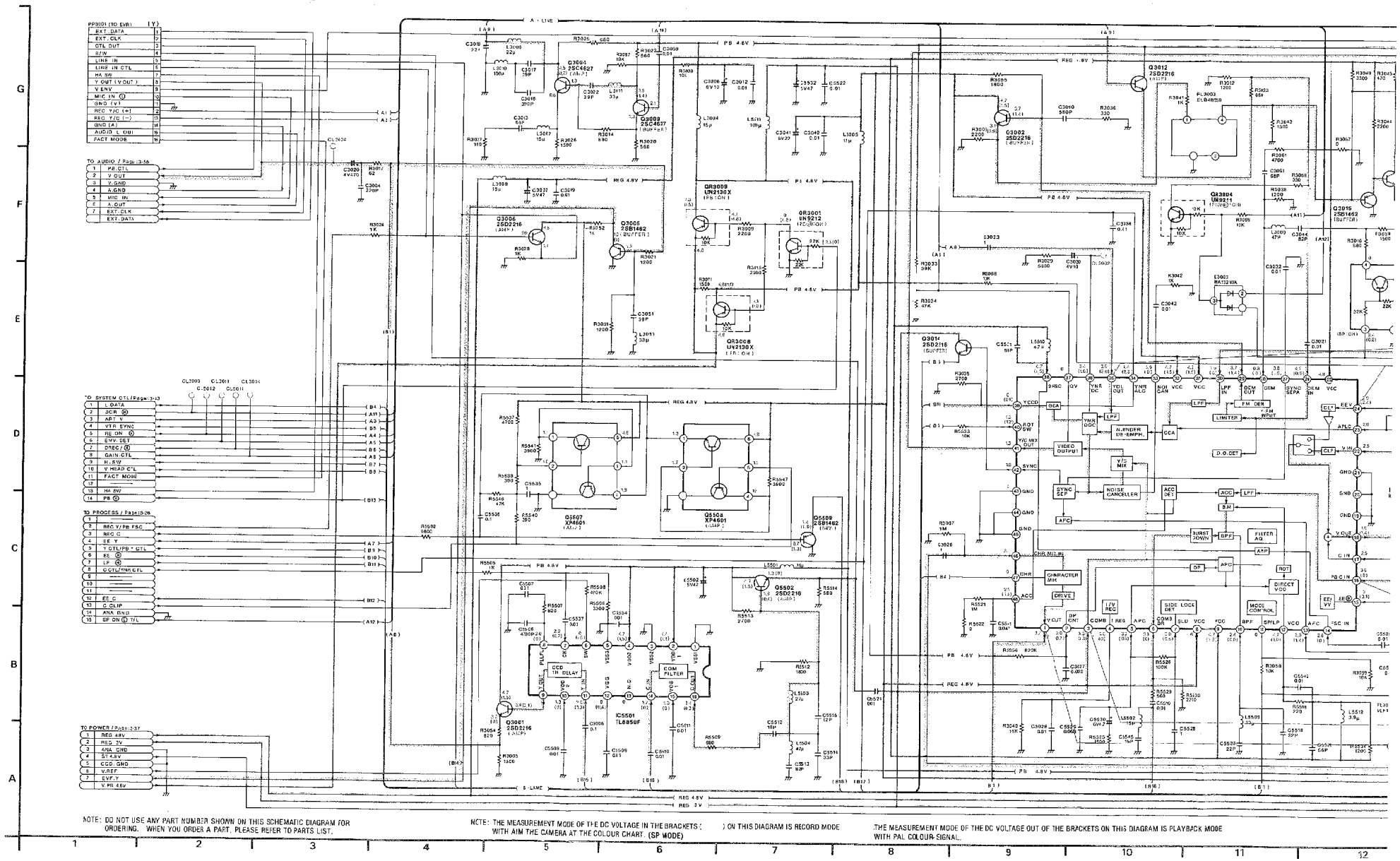



CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLIN
IC6001 MN6751486
IC6006 TA76W393FU
IC6004 AK6440HF
IC6007 TC4W53F
IC6008 TC7W04FTE12L
IC6003 BU8140FV
QR6001 XP1213
QR6002 XP4213
QR6005 MSN1104TE85L
QR6015 UN9215
QR6550 UN9213
Q6004 2SB1462
Q6201 2SB1462
D6008 MA728
D6009 MA132WA
D6010 MA132WK
D6011 MA132WK
D6012 MA132WA
D6013 MA132WA
D6550 MA132WA
CAP SW
CP.OH
CAM LED
VTR LED
A.MUTE
SENS LED
POWER ON
EE
CYL ON
PB
EJECT SW
S/S
VO1
HA SW
IRIS
V.DREC
FM.DREC
R.ERASE
SSG.RST
DRIVE CLK
RESET
EXT DO
BLOCK END
CAM TEST
ATR OFF
E2R/W
REG 4.8V
S REG 3V
A - LINE
B - LINE
9
10
11
12
13
14
15
16
17
18
19
20
3—45
3—46

RVO SPEED LOOP　　CAPSTAN SERVO PHASE LOOP　　CYLINDER SERVO SPEED LOOP　　CYLINDER SERVO PHASE LOOP



3-17 LUMINANCE/CHROMINANCE & HEAD AMP SCHEMATIC DIAGRAM



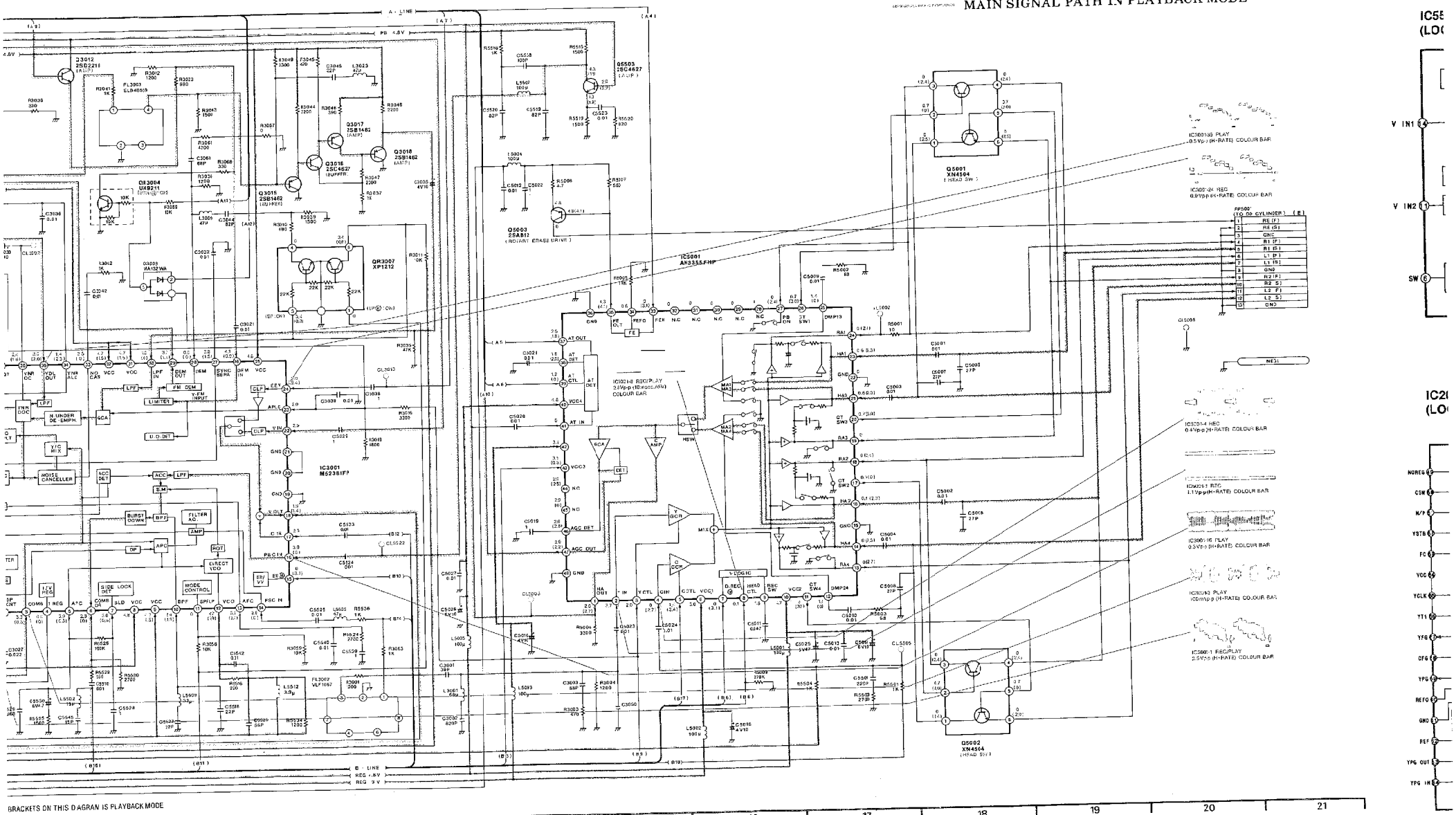
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH AIM THE CAMERA AT THE COLOUR CHART. (SP MODE)

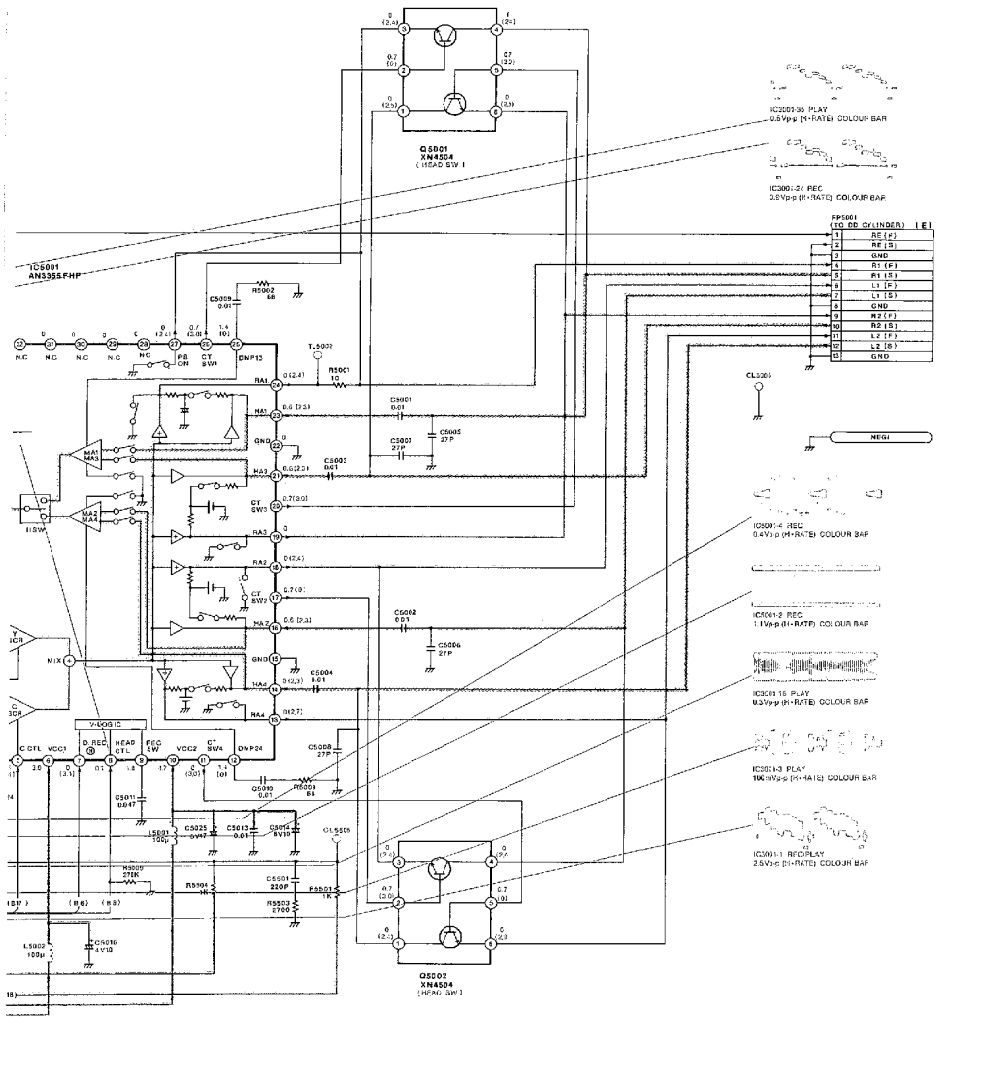
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR-SIGNAL.

Back Page:
SYSTEM CTL & SERVO Section

MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE

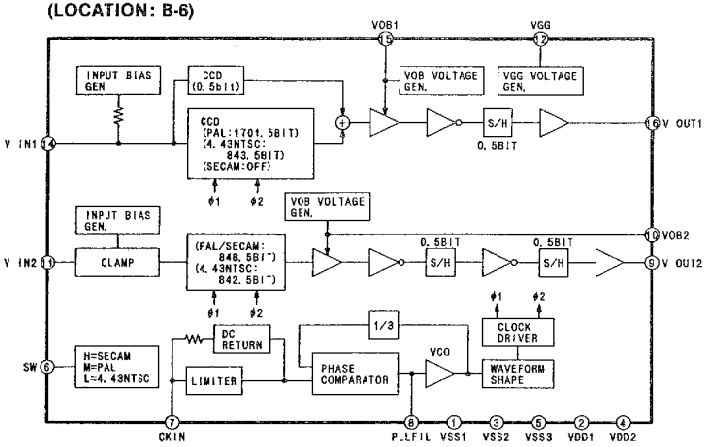


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE

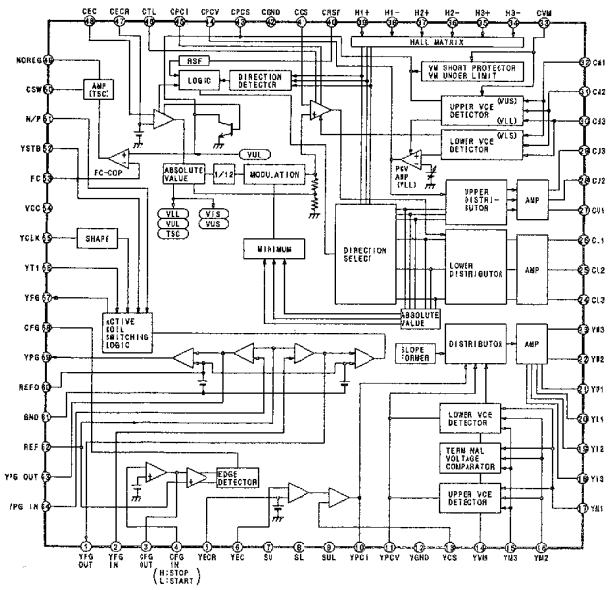


IC BLOCK

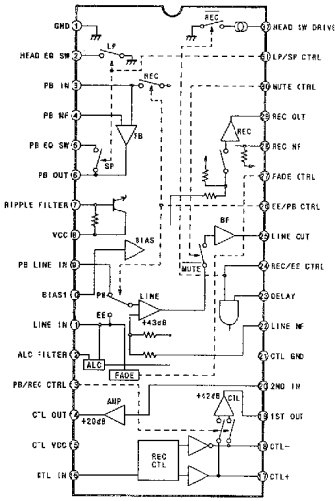
IC5501 (TL8850F)
(LOCATION: B-6)

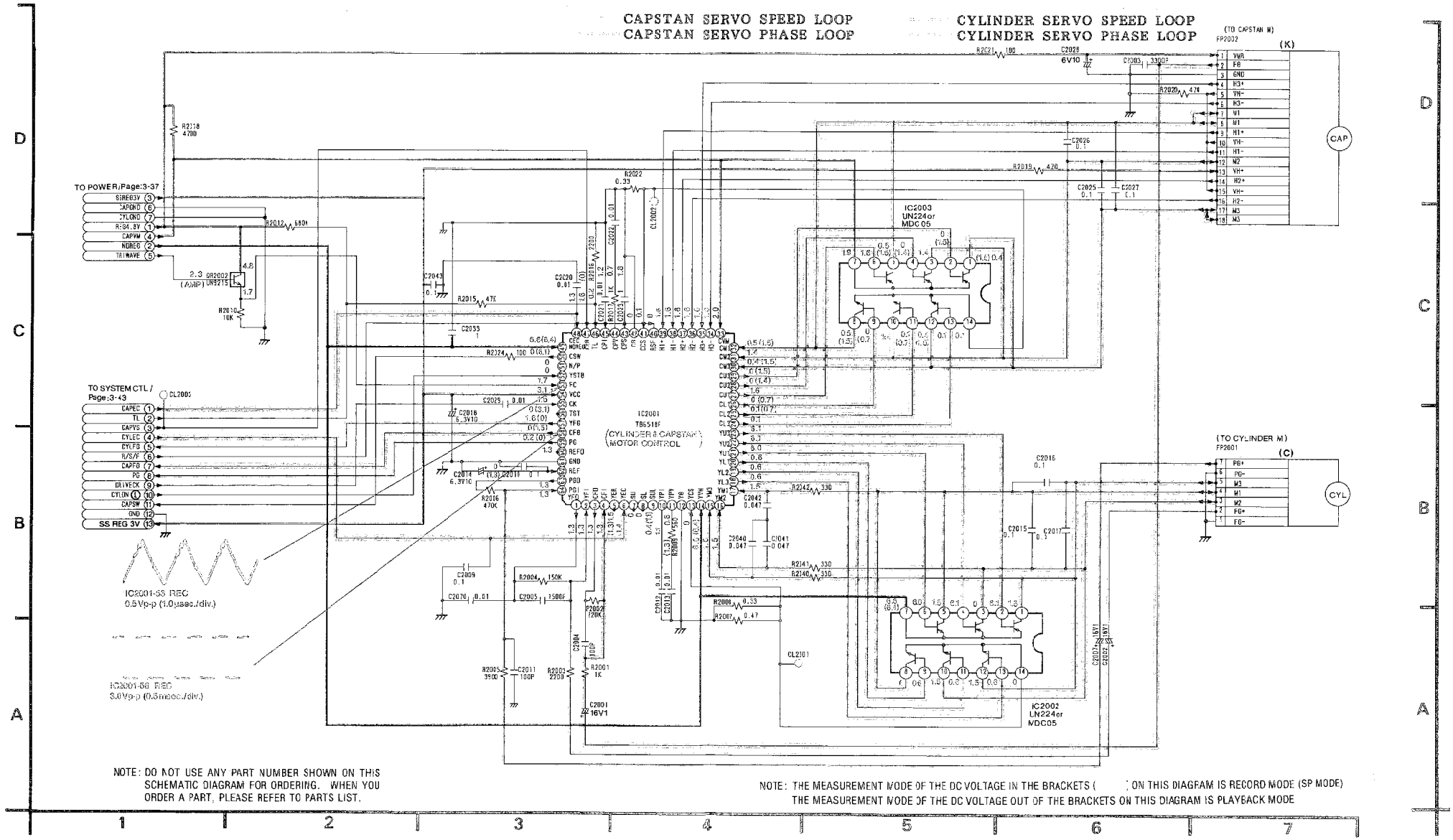


IC2001 (TB6518F)
(LOCATION: B-4)

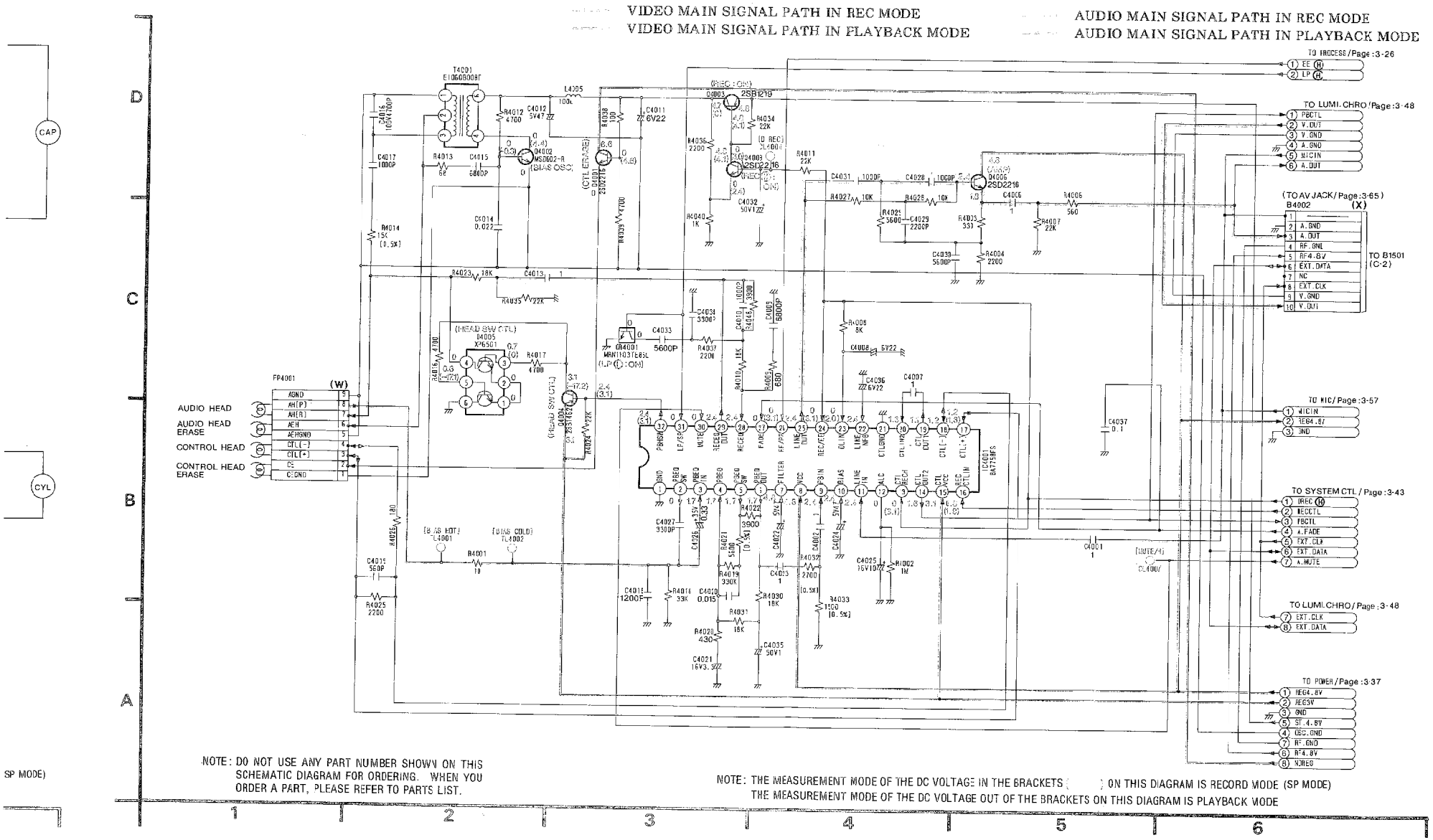


IC4001 (BA7758FS)
(LOCATION: B-5)




CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
TO POWER Page:3-37
SIREG3V
CAPGND
CYLGND
REG4.8V
CAPVM
NDREG
TRIWAVE
TO SYSTEM CTL / Page:3-43
CAPEC
TL
CAPVS
CYLEC
CYLFB
R/S/F
CAPFB
PG
DRIVECK
CYLON
CAPSW
GND
SS REG 3V
IC2001-53 REG
0.5Vp-p (1.0μsec./div.)
IC2001-58 REG
3.0Vp-p (0.5msec./div.)
IC2001
TB6518F
(CYLINDER & CAPSTAN MOTOR CONTROL)
IC2003
LN224or
MDC05
IC2002
LN224or
MDC05
(TO CAPSTAN M)
FP2002
(K)
CAP
(TO CYLINDER M)
FP2001
(C)
CYL
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE

3-19 AUDIO SCHEMATIC DIAGRAM


VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
TO IROCESS / Page : 3-26
TO LUMI. CHRO / Page : 3-48
(TO AV JACK / Page : 3-65)
TO B1501 (C-2)
TO MIC / Page : 3-57
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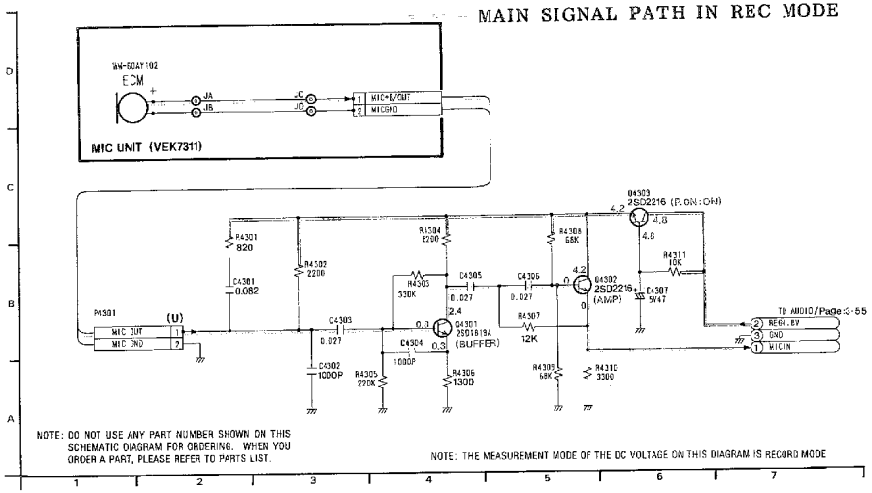
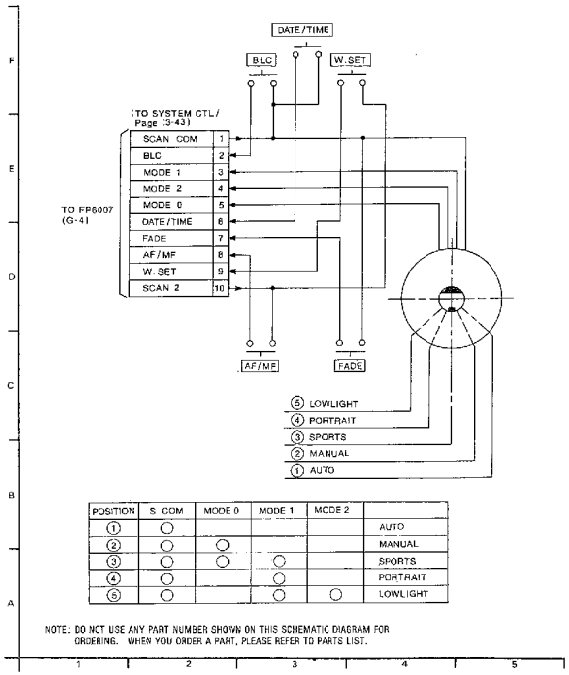
TO LUMI. CHRO / Page : 3-48
TO POWER / Page : 3-37
AUDIO HEAD
AUDIO HEAD ERASE
CONTROL HEAD
CONTROL HEAD ERASE
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE

3-20. MIC SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE
MIC UNIT (VEK7311)
TO AUDIO/Page 3-55
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS RECORD MODE

3-21 CAMERA OPERATION UNIT SCHEMATIC DIAGRAM



POSITION	S. COM	MODE 0	MODE 1	MODE 2	
①	○				AUTO
②	○	○			MANUAL
③	○	○	○		SPORTS
④	○		○		PORTRAIT
⑤	○		○	○	LOWLIGHT

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SUB SERVO, AUDIO Section

Integrated Circuit

IC201	E-14
IC202	E-3
IC203	E-13
IC204	E-4
IC205	E-3
IC301	D-4
IC302	F-12
IC303	E-12
IC304	C-13
IC305	D-13
IC306	D-14
IC307	D-3
IC308	D-3
IC705	D-2
IC706	E-6
IC707	E-5
IC708	D-15
IC710	D-12
IC711	D-3
IC1001	B-11
IC2001	F-15
IC2002	E-1
IC2003	F-2
IC3001	B-13
IC4001	C-14
IC5001	B-2
IC5501	A-5
IC6001	D-10
IC6002	C-7
IC6003	E-6
IC6004	E-9
IC6005	E-7
IC6006	E-11
IC6007	E-8
IC6008	D-8
IC6501	E-2

Transistor

Q201	F-13
Q202	E-3
Q203	F-4
Q204	E-3
Q206	E-4
Q207	E-4
Q401	D-5
Q402	D-12
Q404	D-12
Q481	C-4
Q704	D-5
Q705	D-2
Q1001	B-10
Q1003	A-10
Q1004	A-10
Q1062	B-10
Q3001	B-5
Q3002	B-13
Q3003	B-15
Q3004	B-14
Q3005	C-12
Q3006	B-4
Q3012	C-3
Q3014	C-6
Q3015	C-4
Q3016	C-4
Q3017	C-4
Q3018	C-4
Q4001	C-2
Q4002	D-15
Q4003	C-2
Q4004	B-15
Q4005	B-15
Q4006	C-2
Q4009	D-2
Q4301	B-15
Q4302	B-16
Q4303	B-16
Q5001	A-2
Q5002	A-2
Q5003	A-3
Q5502	B-4
Q5503	B-2
Q5507	C-13
Q5508	C-4
Q5509	C-5
Q6002	E-7
Q6004	D-9
Q6005	D-7
Q6006	D-8
Q6065	D-7
Q6201	C-9
Q6501	E-2

Transistor & Resistor

QR201	E-3
QR401	D-5
QR402	D-4
QR403	D-5
QR701	E-11
QR710	D-1
QR1001	A-9
QR1061	B-11
QR2002	F-2
QR3001	A-4
QR3004	B-13
QR3007	B-4
QR3008	A-13
QR3009	A-13
QR4001	C-15
QR5501	B-2
QR6002	C-6
QR6003	D-8
QR6004	F-6
QR6005	D-11
QR6007	D-8
QR6010	D-7
QR6014	D-9
QR6015	D-9
QR6050	C-9
QR6501	E-2
QR6502	E-2
QR6550	E-7

Diode

D201	E-3
D202	E-3
D203	E-3
D204	E-3
D481	D-5
D482	C-12
D701	E-15
D1002	B-10
D1006	B-10
D1007	B-10
D1015	B-10
D3002	B-3
D3003	C-14
D6001	E-12
D6002	F-6
D6003	F-6
D6004	F-6
D6005	F-5
D6006	E-10
D6008	F-5
D6009	E-8
D6011	E-7
D6012	D-7
D6013	F-6
D6016	B-9
D6018	D-7
D6501	E-2
D6502	E-2
D6503	F-2
D6550	E-11

Transformer

T1001	B-7
T1002	B-7
T4001	D-2

Test Point

CL201	E-14
CL202	E-12
CL203	E-13
CL204	E-13
CL205	F-13
CL301	E-13
CL302	D-14
CL303	D-14
CL304	D-13
CL305	D-14
CL306	D-13
CL701	D-11
CL703	E-15
CL705	E-12
CL706	E-12
CL707	E-12
CL708	E-12
CL709	D-12
CL710	C-12
CL1001	C-12
CL1002	C-12
CL1004	C-11
CL1005	C-11
CL1006	C-11
CL1007	B-9
CL1008	A-9
CL1009	A-9
CL1010	B-9
CL1014	A-11
CL1015	C-10
CL2001	E-15
CL2002	F-15
CL3003	E-11
CL3003	C-9
CL3004	B-16
CL3011	B-14
CL3013	B-13
CL3014	B-14
CL4004	C-14
CL4007	D-16
CL5003	B-15
CL5011	B-15
CL5012	B-14
CL5502	B-2
CL5516	A-13
CL5522	B-14
CL6001	C-10
CL6002	C-10
CL6003	C-10
CL6004	E-9
CL6005	C-10
CL6006	C-9
CL6007	C-10
CL6008	C-11
CL6009	C-10
CL6010	E-9
CL6011	E-9
CL6012	E-9
CL6013	E-9
CL6014	A-9
CL6015	E-11
CL6016	C-9
CL6017	D-11
CL6018	C-10
CL6019	C-10
CL6020	C-10
CL6204	C-10
CL6205	C-9
CL6206	D-11
CL6207	E-11
CL6208	D-11
CL6210	E-11
CL6211	E-11
TL301	C-13
TL701	E-15
TL1001	B-9
TL3002	B-13
TL4001	C-16
TL4002	D-16
TL5001	B-15
TL5002	B-14
TL5005	A-15
TL5505	B-15

Adjustment

C308	C-14

Thermistor

TH701	E-15

Connector

B201	F-14
B401	D-12
B1001	C-8
B4002	B-1
FF701	D-16
FP2001	C-1
FP2002	F-16
FP4001	C-16
FP5001	A-15
FP6001	E-10
FP6002	E-11
FP6006	F-12
FP6007	F-14
P301	B-1
P502	F-13
P4301	A-16
P6009	B-16
PP3001	A-14

Crystal Oscillator

X301	C-3
X701	D-6
X6001	D-8
X6002	D-8

Filter

FL201	F-4
FL3002	B-5
FL3003	C-3

Coil

L201	F-4
L202	F-4
L203	E-13
L204	F-4
L206	E-3
L207	E-3
L208	F-4
L209	E-14
L210	F-14
L211	F-14
L212	E-4
L213	E-3
L302	E-12
L303	E-3
L304	E-13
L305	E-14
L306	D-14
L307	D-14
L308	E-3
L309	C-11
L310	E-12
L311	C-11
L402	E-12
L403	D-13
L404	D-13
L405	D-13
L406	E-12
L701	E-15
L703	D-14
L704	D-5
L705	F-4
L706	E-5
L707	E-5
L708	F-5
L1001	B-8
L1002	B-7
L1003	C-8
L1006	B-11
L1007	A-7
L1008	A-6
L1010	C-1
L1011	C-1
L1012	C-1
L1014	C-1
L1015	B-1
L1062	C-7
L3001	B-4
L3004	C-5
L3005	B-4
L3006	B-3
L3007	B-14
L3008	C-12
L3009	B-14
L3010	B-3
L3011	B-15
L3023	B-3
L3051	C-12
L4005	D-15
L5001	A-14
L5002	B-15
L5003	B-15
L5004	B-3
L5005	B-14
L5501	A-4
L5502	A-4
L5503	B-4
L5504	A-4
L5505	B-12
L5507	B-2
L5509	B-12
L5510	C-13
L5511	C-5
L5512	B-5
L6002	F-6
L6005	B-9

Capacitor

C201	F-4
C202	F-4
C203	E-4
C204	F-4
C205	F-13
C206	F-4
C207	E-4
C208	E-4
C209	E-4
C210	F-4
C211	F-4
C212	E-13
C213	E-4
C214	F-4
C218	E-13
C219	E-13
C220	E-13
C221	E-14
C222	E-5
C223	E-14
C224	F-3
C225	E-3
C226	F-3
C227	F-13
C228	F-13
C229	F-3
C230	E-13
C231	F-3
C232	F-3
C233	E-3
C234	E-3
C235	F-14
C236	E-3
C238	E-13
C302	E-12
C303	E-12
C304	E-12
C305	E-12
C306	C-13
C307	C1041
C309	C1042
C310	C1043
C311	C1044
C312	C1045
C313	C1046
C314	C1047
C315	C1048
C317	C1049
C321	C1050
C402	C1051
C403	C1052
C404	C1053
C405	C1054
C406	C1055
C407	C1056
C408	C1057
C409	C1058
C410	C1059
C412	C1060
C413	C1061
C414	C1062
C415	C1063
C416	C1064
C417	C1065
C418	C1066
C701	C1067
C702	C1068
C703	C1069
C704	C1070
C705	C1071
C706	C1072
C707	C1073
C708	C1074
C709	C1075
C711	C1076
C712	C1077
C713	C1078
C715	C1079
C719	C1080
C720	C1081
C721	C1082
C722	C1083
C724	C1084
C725	C1085
C729	C1086
C731	C1087
C732	C1088
C737	C1089
C750	C1090
C1001	C1091
C1002	C1092
C1003	C1093
C1004	C1094
C1005	C1095
C1007	C1096
C1008	C1097
C1009	C1098
C1010	C1099
C1012	C1100
C1014	C1101
C1017	C1102
C1019	C1103
C1020	C1104
C1022	C1105
C1024	C1106
C1025	C1107
C1026	C1108
C1027	C1109
C1028	C1110
C1029	C1111
C1030	C1112
C1031	C1113
C1032	C1114
C1033	C1115
C1034	C1116
C1035	C1117
C1036	C1118
C1037	C1119
C1040	C1120

ADDRESS INFORMATION

MAIN C.B.A.

L1003	C-6
L1006	B-11
L1007	A-7
L1008	A-6
L1010	C-11
L1011	C-11
L1012	C-11
L1014	C-11
L1015	E-11
L1062	C-7
L3001	B-4
L3004	C-5
L3005	B-4
L3006	B-3
L3007	B-14
L3008	C-12
L3009	B-14
L3010	B-3
L3011	B-15
L3023	B-3
L3051	C-12
L4005	D-15
L5001	A-14
L5002	B-15
L5003	B-15
L5004	B-3
L5005	B-14
L5501	A-4
L5502	A-4
L5503	B-4
L5504	A-4
L5505	B-12
L5507	B-2
L5509	B-12
L5510	C-13
L5511	C-5
L5512	B-5
L6002	F-6
L6005	B-9

Capacitor

C201	F-4
C202	F-4
C203	E-4
C204	F-4
C205	F-13
C206	F-4
C207	E-4
C208	E-4
C209	E-4
C210	F-5
C211	F-4
C212	E-13
C213	E-4
C214	F-4
C218	E-13
C219	E-13
C220	E-13
C221	E-14
C222	E-3
C223	E-14
C224	F-3
C225	E-3
C226	F-3
C227	F-13
C228	F-13
C229	F-3
C230	E-13
C231	F-3
C232	F-3
C233	E-3
C234	E-3
C235	F-14
C236	E-3
C238	E-13
C302	E-12
C303	E-12
C304	E-12
C305	E-12
C306	C-13
C307	C-13
C309	E-3
C310	D-14
C311	E-12
C312	E-3
C313	D-3
C314	D-13
C315	E-14
C317	D-3
C321	D-14
C402	E-4
C403	D-5
C404	D-5
C405	D-4
C406	D-4
C407	D-4
C408	D-4
C409	D-5
C410	D-5
C412	D-5
C413	D-13
C414	E-4
C415	D-13
C416	D-4
C417	D-13
C418	D-13
C701	D-1
C702	D-2
C703	D-5
C704	D-5
C705	D-11
C706	F-5
C707	F-5
C708	F-4
C709	E-12
C711	E-1
C712	E-12
C713	F-5
C715	D-5
C719	D-5
C720	E-5
C721	D-5
C722	D-6
C724	E-5
C725	E-5
C729	D-15
C731	E-5
C732	D-14
C737	E-15
C750	D-2
C1001	B-10
C1002	B-8
C1003	B-6
C1004	B-11
C1005	C-6
C1007	C-6
C1008	A-7
C1009	A-11
C1010	B-5
C1012	A-10
C1014	B-11
C1017	B-10
C1019	C-11
C1020	B-10
C1022	C-11
C1024	A-12
C1025	B-12
C1026	A-5
C1027	A-5
C1028	B-5
C1029	B-12
C1030	B-12
C1031	B-11
C1032	B-11
C1033	B-11
C1034	B-11
C1035	A-11
C1036	A-11
C1037	A-11
C1040	B-9
C1041	B-9
C1042	B-12
C1051	B-5
C1057	C-5
C1064	C-7
C1066	C-7
C2001	E-2
C2002	F-2
C2003	E-2
C2004	E-15
C2005	E-15
C2007	F-3
C2009	F-2
C2010	F-3
C2011	E-15
C2012	E-15
C2013	E-15
C2014	F-3
C2015	F-2
C2016	F-1
C2017	F-1
C2018	F-3
C2020	F-3
C2021	F-15
C2022	F-15
C2023	F-15
C2025	F-15
C2026	F-15
C2027	F-15
C2028	E-1
C2029	E-11
C2033	F-3
C2040	E-15
C2041	E-15
C2042	E-15
C2043	F-3
C2070	E-15
C3001	B-4
C3002	B-3
C3003	B-3
C3004	C-12
C3006	B-12
C3008	B-5
C3010	B-14
C3012	C-14
C3013	B-14
C3016	B-14
C3017	B-14
C3018	B-3
C3019	B-13
C3020	C-5
C3021	B-13
C3022	B-15
C3023	B-5
C3026	C-13
C3027	C-12
C3028	B-5
C3029	C-13
C3030	C-13
C3032	B-13
C3035	C-13
C3036	B-13
C3037	B-4
C3038	B-13
C3039	B-13
C3040	B-4
C3041	B-4
C3042	B-13
C3044	B-14
C3045	C-3
C3051	C-12
C3059	B-2
C3061	A-3
C3094	C-12
C4001	D-14
C4002	D-14
C4005	C-2
C4007	C-14
C4008	C-3
C4009	C-15
C4010	C-15
C4011	C-2
C4012	D-2
C4013	C-15
C4014	D-15
C4016	D-15
C4017	C-2
C4018	C-15
C4019	C-14
C4020	C-15
C4021	C-2
C4022	C-3
C4023	D-15
C4024	D-3
C4025	D-3
C4026	C-15
C4027	C-15
C4028	C-2
C4029	C-2
C4030	C-2
C4031	C-2
C4032	C-3
C4033	C-15
C4034	C-15
C4035	B-2
C4036	C-3
C4037	C-14
C4301	A-16
C4302	B-16
C4303	B-15
C4304	B-16
C4305	B-15
C4306	B-16
C4307	B-2
C5001	A-3
C5002	A-2
C5003	A-2
C5004	A-2
C5005	A-3
C5006	A-2
C5007	A-3
C5008	A-2
C5009	B-3
C5010	B-2
C5011	B-15
C5012	C-14
C5013	B-15
C5014	B-15
C5016	B-15
C5018	B-3
C5019	B-2
C5020	B-15
C5021	B-14
C5022	A-3
C5023	B-15
C5024	B-15
C5025	B-2
C5026	B-14
C5027	B-15
C5501	B-4
C5502	A-4
C5505	B-12
C5506	A-5
C5507	A-5
C5508	A-12
C5509	A-12
C5510	A-12
C5511	A-12
C5512	B-4
C5513	A-4
C5514	B-4
C5515	A-3
C5516	B-2
C5518	B-12
C5519	B-2
C5520	C-3
C5521	B-12
C5522	B-5
C5523	B-2
C5524	B-4
C5525	B-12
C5526	B-5
C5527	B-12
C5528	B-12
C5529	B-12
C5530	B-5
C5531	C-13
C5532	B-4
C5533	B-4
C5534	A-5
C5535	C-13
C5536	C-5
C5537	A-5
C5538	C-2
C5539	B-12
C5540	B-12
C5541	C-12
C5542	B-12
C5545	A-4
C6001	E-7
C6002	E-10
C6003	E-7
C6004	E-11
C6005	D-7
C6006	C-9
C6007	C-10
C6008	C-6
C6009	E-8
C6010	D-8
C6011	D-7
C6012	C-10
C6013	D-8
C6014	E-10
C6015	E-7
C6016	D-8
C6017	E-6
C6018	C-8
C6019	D-11
C6020	D-8
C6022	D-7
C6023	D-7
C6025	E-6
C6027	E-8
C6030	E-7
C6031	E-10
C6032	C-11
C6038	D-10
C6039	E-11
C6040	E-7
C6060	D-9
C6061	C-7
C6100	D-7
C6201	D-11
C6202	D-7
C6203	D-8
C6204	D-11
C6205	D-10
C6206	D-6
C6207	E-10
C6208	D-11
C6209	D-6
C6210	D-11
C6501	E-2
C6502	E-2
C6503	E-2
C6504	E-3

Resistor

R201	F-4
R202	F-4
R203	F-3
R204	F-4
R206	E-4
R209	E-4
R210	E-4
R211	E-4
R212	F-12
R213	E-4
R214	E-4
R215	F-14
R216	F-3
R217	E-4
R218	E-4
R219	F-14
R220	F-13
R221	F-3
R222	E-3
R223	E-3
R224	E-4
R225	F-5
R226	E-14
R228	F-13
R229	E-4
R231	E-3
R232	E-3
R235	E-4
R236	E-4
R237	F-4
R238	F-4
R239	F-4
R240	E-14
R241	E-14
R242	E-13
R243	E-4
R245	E-4
R246	E-13
R249	F-5
R250	E-4
R252	F-4
R301	E-12
R302	E-12
R303	E-12
R304	C-13
R305	E-6
R306	E-4
R307	E-5
R308	D-3
R309	D-14
R310	E-6
R311	D-3
R312	D-3
R313	D-13
R314	D-14
R317	D-13
R318	D-14
R321	C-13
R322	F-5
R323	F-5
R324	D-13
R325	D-14
R327	D-14
R402	D-13
R403	D-13
R404	D-13
R405	D-5
R406	C-12
R407	D-13
R408	D-13
R409	D-13
R410	D-13
R411	D-5
R412	D-5
R413	C-5
R414	D-13
R415	C-13
R417	D-5
R418	D-5
R419	D-5
R420	D-5
R481	C-4
R483	C-4
R702	D-2
R703	E-2
R704	E-15
R705	D-12
R706	D-12
R716	D-5
R717	D-5
R718	D-5
R719	E-5
R720	E-6
R721	E-6
R722	D-5
R723	D-5
R724	D-2
R725	D-2
R726	D-15
R727	D-3
R728	D-3
R729	E-3
R730	D-2
R731	D-2
R732	E-2
R733	D-2
R734	D-2
R735	D-3
R736	D-2
R737	D-2
R738	E-3
R739	D-3
R740	E-2
R741	E-12
R742	E-5
R743	E-5
R744	E-5
R745	E-12
R746	E-5
R747	E-5
R748	E-5
R749	E-5
R750	E-5
R752	E-11
R756	D-5
R757	F-4
R758	E-12
R760	D-15
R761	D-5
R764	E-15
R770	E-12
R771	E-12
R772	F-5
R773	F-5
R775	E-5
R777	D-2
R778	D-2
R779	D-2
R781	E-15
R782	E-15
R1001	B-11
R1002	B-11
R1005	A-11
R1006	A-11
R1007	A-10
R1008	B-11
R1009	B-11
R1012	B-12
R1013	A-12
R1014	A-12
R1015	A-12
R1016	B-6
R1017	B-12
R1018	B-12
R1019	B-12
R1020	B-11
R1021	B-11
R1022	B-11
R1023	A-10
R1024	A-11
R1025	A-11
R1035	A-16
R1038	B-11
R1039	A-11
R1040	B-11
R1051	B-5
R1052	B-6
R1063	B-12
R1065	B-10
R1071	B-11
R1072	B-11
R1073	B-11
R1080	C-6
R2001	E-1
R2002	E-15
R2003	E-14
R2004	E-15
R2005	F-2
R2006	F-15
R2007	E-2
R2008	F-2
R2009	E-15
R2010	F-2
R2012	F-2
R2015	F-2
R2016	F-2
R2017	F-15
R2018	F-2
R2019	F-15
R2020	E-1
R2021	E-1
R2022	F-2
R2024	F-2
R2040	E-15
R2041	E-15
R2042	E-15
R3001	B-13
R3003	B-3
R3004	B-3
R3005	A-5
R3006	C-13
R3007	C-13
R3008	C-14
R3009	A-4
R3010	B-14
R3011	A-4
R3012	B-13
R3014	E-15
R3015	A-4
R3016	E-13
R3017	C-12
R3018	E-13
R3019	B-13
R3020	C-15
R3021	C-12
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R3025	B-14
R3026	B-15
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R3034	C-13
R3035	B-13
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R3037	C-4
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R3044	B-3
R3045	B-4
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R3049	B-3
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R3053	B-5
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R3055	B-13
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R3058	B-12
R3059	B-12
R3061	B-3
R3063	B-5
R3067	B-3
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R3069	C-14
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R4004	C-2
R4006	C-2
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R4014	C-2
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R4017	B-15
R4018	C-15
R4019	C-15
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R4022	C-15
R4023	C-15
R4024	C-15
R4025	C-14
R4026	C-14
R4027	C-2
R4028	C-2
R4029	C-2
R4030	C-15
R4031	C-15
R4032	D-15
R4033	D-14
R4034	C-2
R4035	C-15
R4036	D-15
R4037	C-15
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R4039	C-2
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R4336	B-16
R4307	B-16
R4308	B-16
R4309	B-16
R4310	B-16
R4311	B-16
R5001	A-14
R5002	A-3
R5003	A-2
R5004	B-2
R5005	B-3
R5007	A-3
R5008	A-3
R5009	C-13
R5501	B-4
R5502	C-5
R5503	B-4
R5504	B-4
R5505	A-5
R5506	A-5
R5507	A-5
R5508	A-5
R5509	B-4
R5512	A-3
R5513	B-4
R5514	A-4
R5515	C-3
R5516	B-12
R5517	B-5
R5518	C-3
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R5522	C-13
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R5526	B-12
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R5537	C-13
R5538	C-13
R5540	C-4
R5541	C-13
R5546	C-4
R5547	C-4
R6001	F-11
R6003	E-6
R6004	D-6
R6005	D-8
R6006	E-8
R6007	D-7
R6008	C-9
R6009	E-11
R6010	D-11
R6011	C-11
R6012	D-11
R6013	E-11
R6014	E-11
R6015	E-11
R6016	E-11
R6017	E-7
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R6019	E-7
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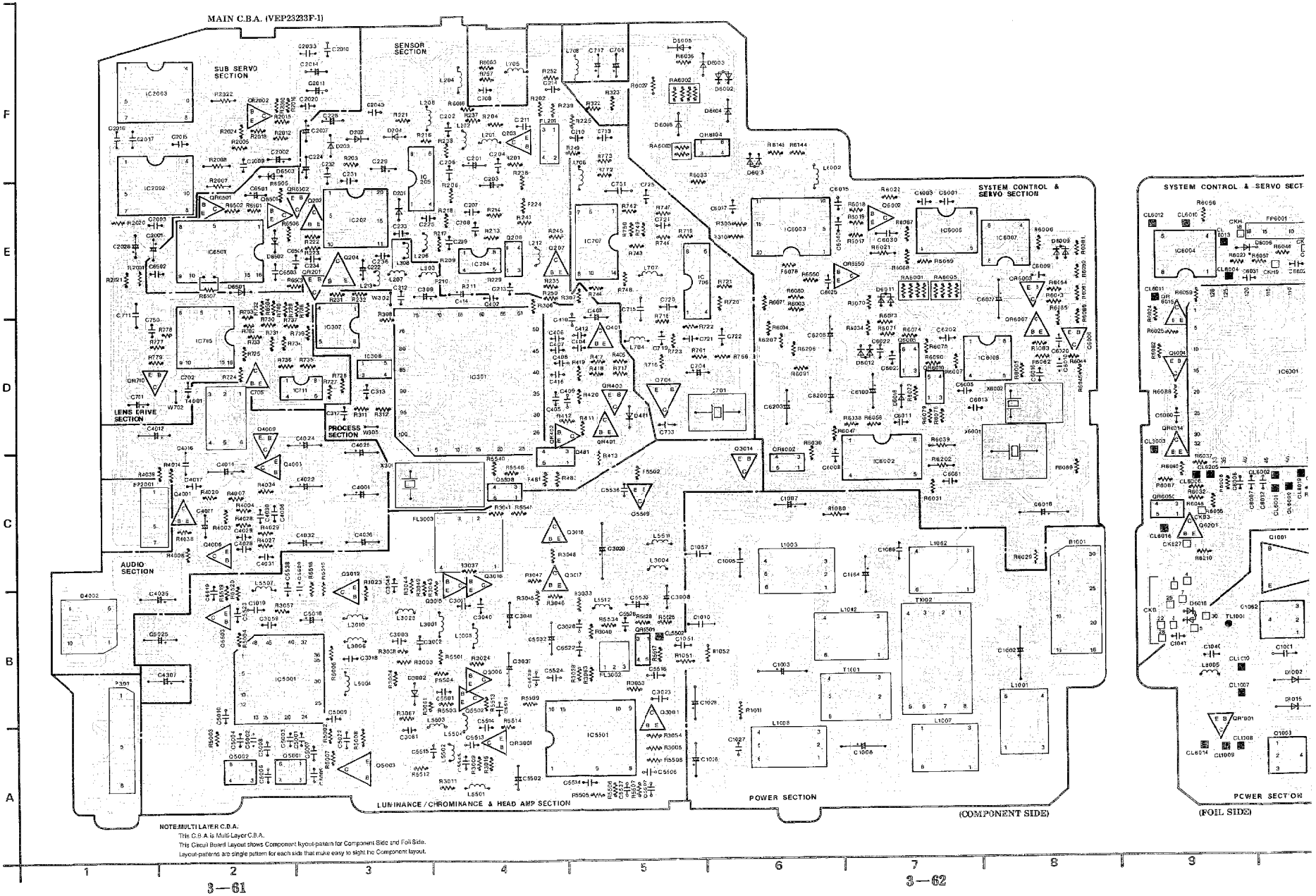
R6021	E-7
R6022	E-7
R6023	D-11
R6024	D-9
R6025	D-9
R6026	D-11
R6027	F-5
R6029	C-8
R6030	C-6
R6031	C-7
R6032	C-9
R6033	E-6
R6034	D-7
R6035	C-10
R6036	F-5
R6037	C-9
R6038	D-7
R6039	C-7
R6042	E-11
R6043	E-8
R6044	D-8
R6045	D-8
R6046	E-10
R6047	D-6
R6048	C-9
R6049	C-11
R6050	E-8
R6051	C-11
R6052	C-11
R6053	C-11
R6054	E-8
R6055	C-9
R6056	E-9
R6057	E-10
R6058	D-7
R6059	E-9
R6060	C-9
R6061	E-8
R6062	D-8
R6063	F-4
R6064	E-11
R6065	E-10
R6066	F-4
R6067	E-7
R6068	E-7
R6069	E-7
R6070	E-7
R6071	D-7
R6072	D-7
R6073	D-7
R6074	D-7
R6075	D-7
R6076	D-7
R6077	E-6
R6078	E-6
R6079	D-6
R6080	E-6
R6081	E-8
R6082	D-9
R6083	D-8
R6084	D-11
R6085	D-8
R6086	D-8
R6087	C-9
R6088	D-9
R6089	C-8
R6090	D-7
R6091	D-6
R6095	E-11
R6144	F-6
R6145	F-6
F6201	C-11
F6202	C-7
F6203	C-10
F6204	D-11
F6205	D-11
F6206	D-6
F6207	D-6
F6208	E-11
F6209	D-11
F6210	C-9
R6501	E-2
R6502	E-2
R6503	E-2
R6504	E-2
R3550	E-6

Resistor Array

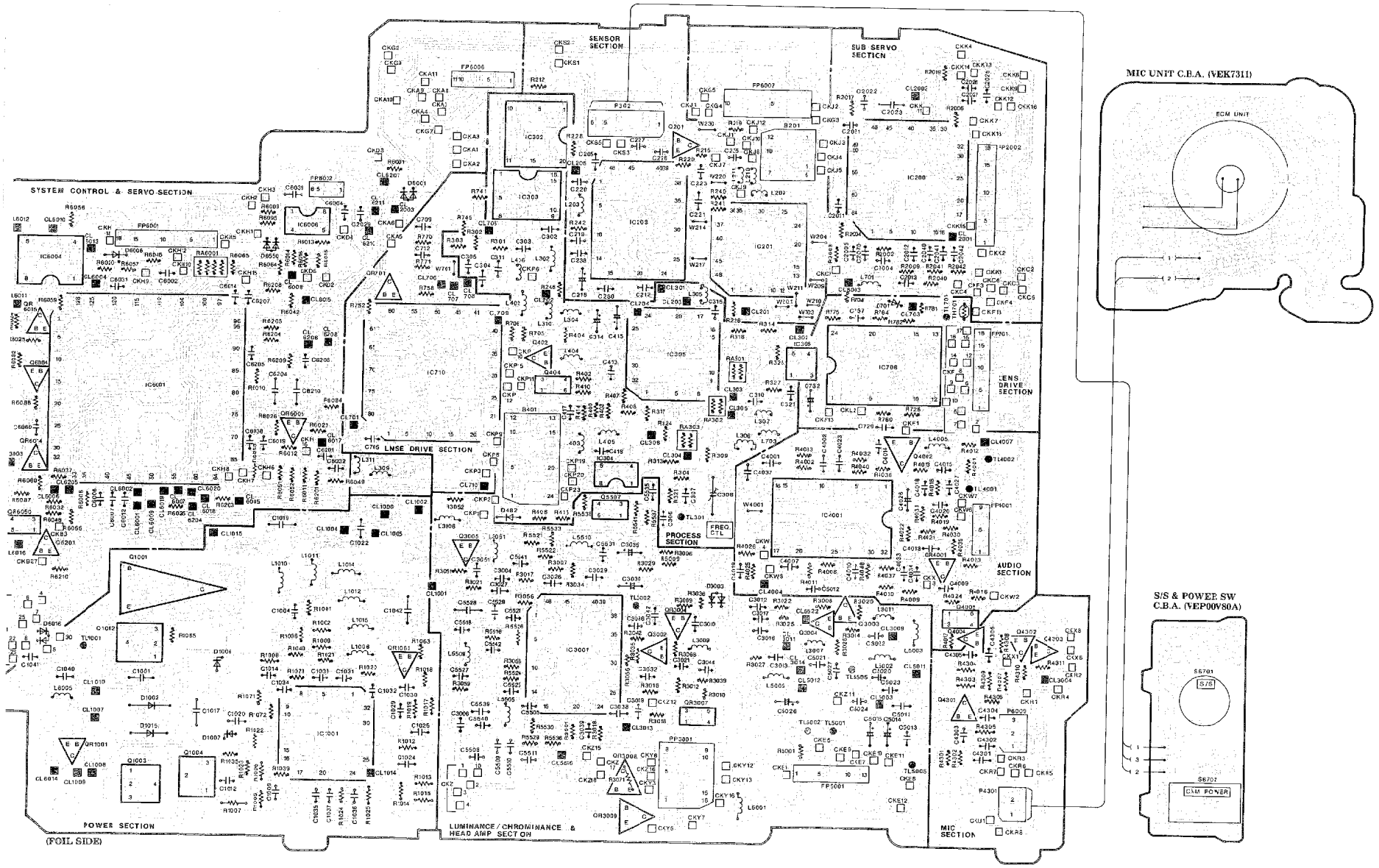
RA301	D-14
RA302	D-14
RA303	D-13
RA6001	E-10
RA6002	F-5
RA6003	F-5
RA6004	E-7
RA6005	E-7

Wire

W201	E-14
W204	E-14
W209	E-14
W210	E-14
W211	E-14
W214	E-14
W217	E-14
W220	E-14
W230	F-14
W302	E-3
W305	D-3
W701	E-12
W702	D-2
W703	E-14
W4001	C-14

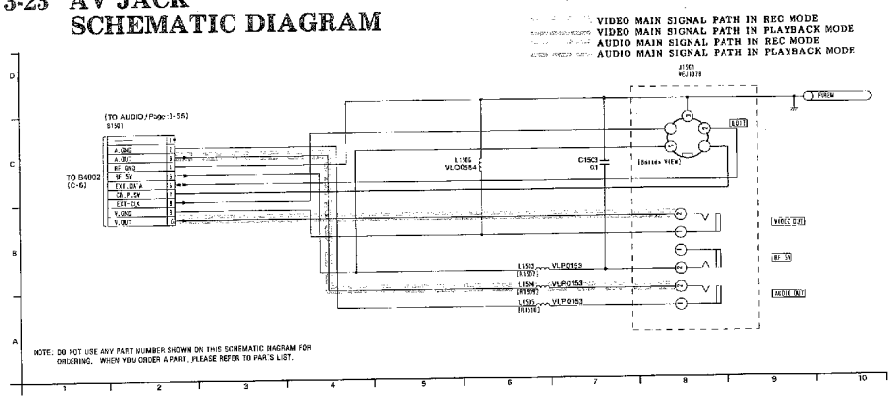

MAIN C.B.A. (VEP23233F-1)
SUB SERVO SECTION
SENSOR SECTION
SYSTEM CONTROL & SERVO SECTION
LENS DRIVE SECTION
PROCESS SECTION
AUDIO SECTION
LUMINANCE / CHROMINANCE & HEAD AMP SECTION
POWER SECTION
(COMPONENT SIDE)
SYSTEM CONTROL & SERVO SECT
PCWER SECT'ON
(FOIL SIDE)
NOTE:MULTI LAYER C.B.A.
This C.B.A. is Multi-Layer C.B.A.
This Circuit Board Layout shows Component layout-pattern for Component Side and Foil Side.
Layout-patterns are single pattern for each side that make easy to sight no Component layout.

) AMP, AUDIO, SUB SERVO, MIC Section] C.B.A. (VEP23233F-1)

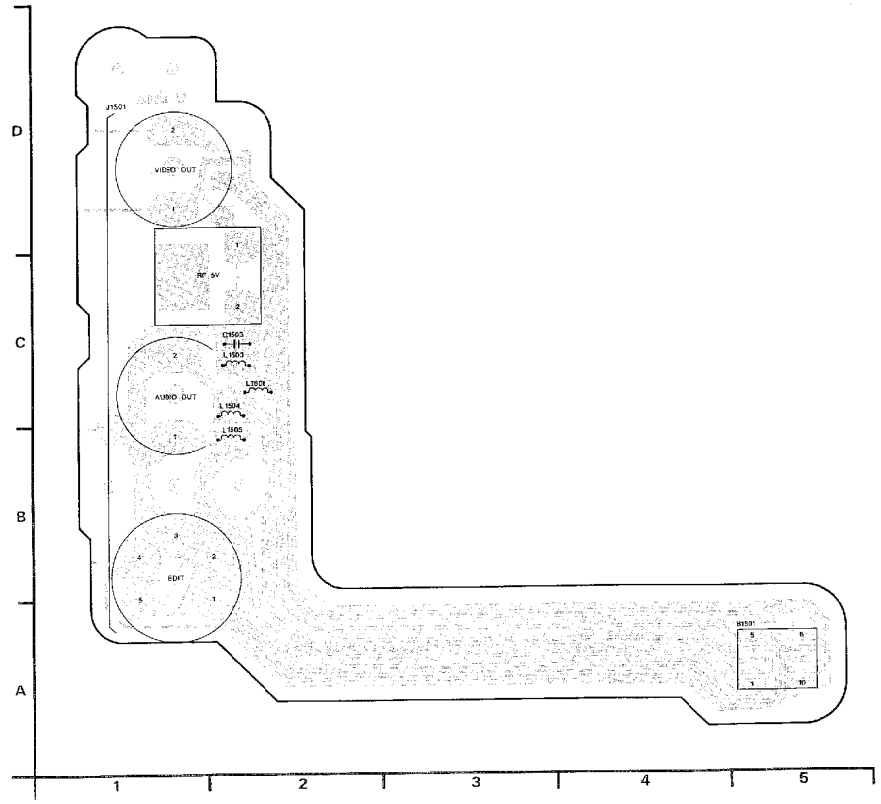


3-23 AV JACK SCHEMATIC DIAGRAM

AV JACK, IR SENSOR, FOCUS VR Section

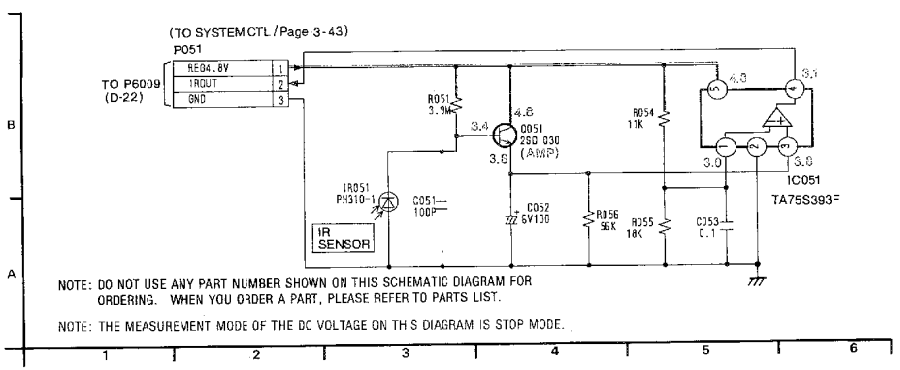

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PAR'S LIST.

3-24. AV JACK C.B.A. (VEP04457D)

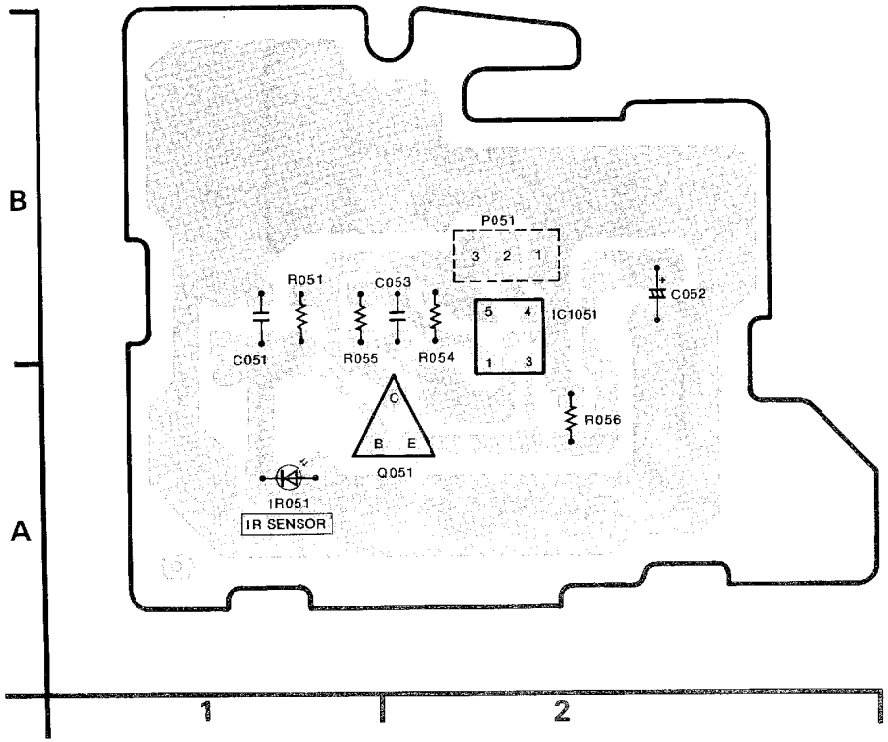


Back Page:
MAIN C.B.A. Section

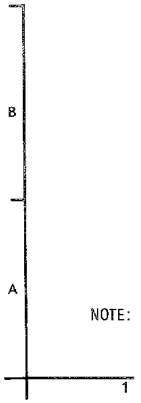
3-25 IR SENSOR SCHEMATIC DIAGRAM



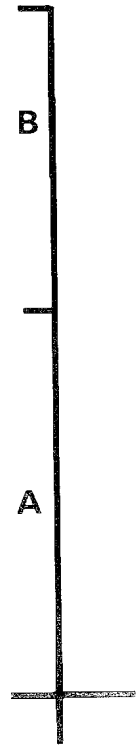
3-26 IR SENSOR C B A (VEP00V61A)



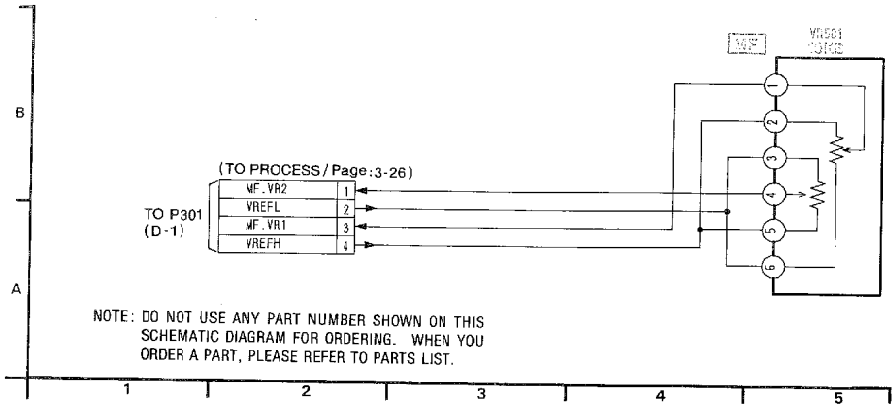
3-27 FOCU



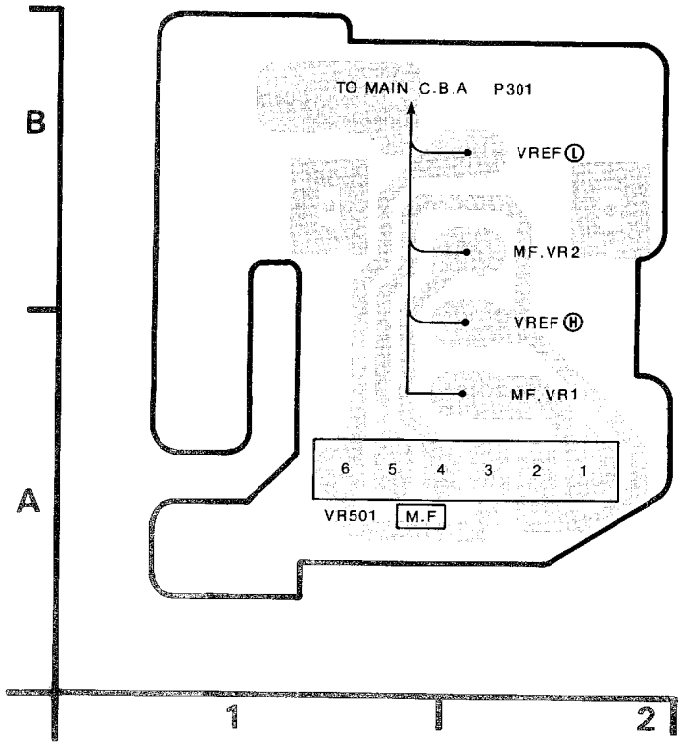
3-28 FOCU



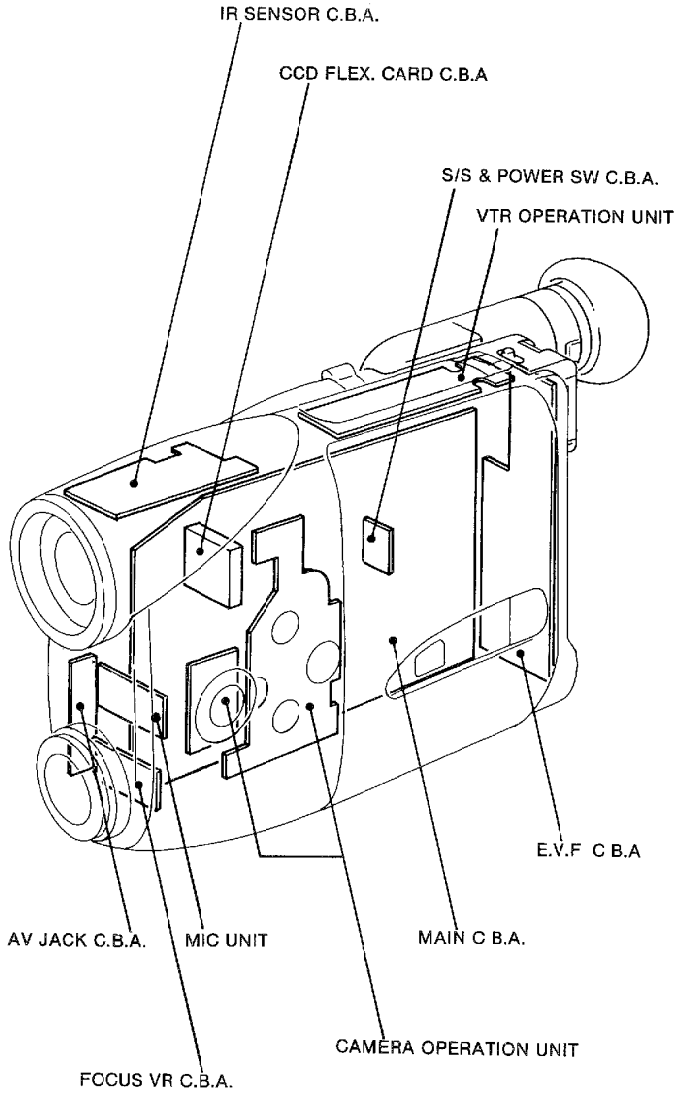
3-27 FOCUS VR SCHEMATIC DIAGRAM



3-28. FOCUS VR C.B.A. (VEP00V02A)

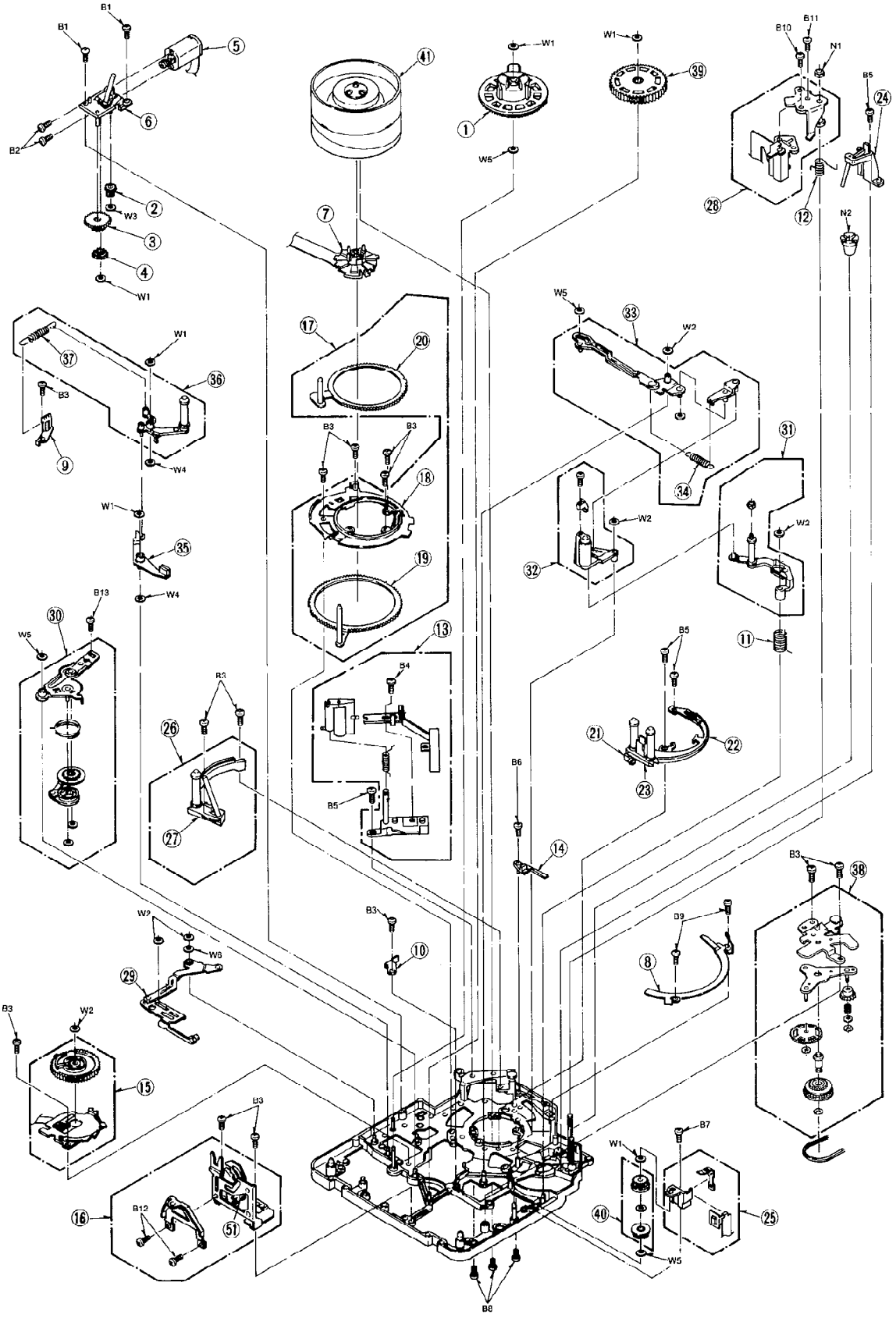


3-29 CIRCUIT BOARD LAYOUT

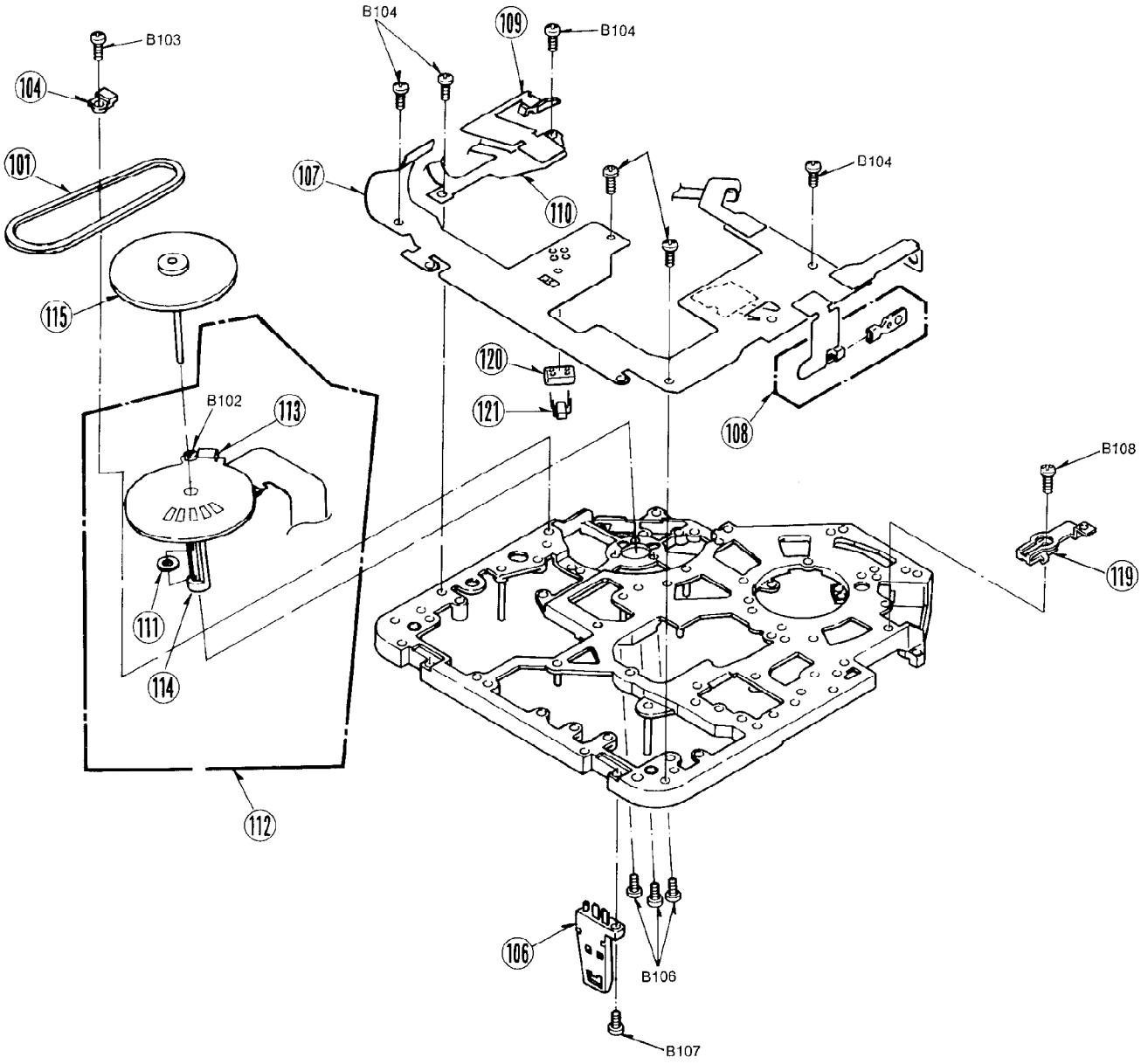


SECTION 4
EXPLODED VIEWS & PARTS LIST

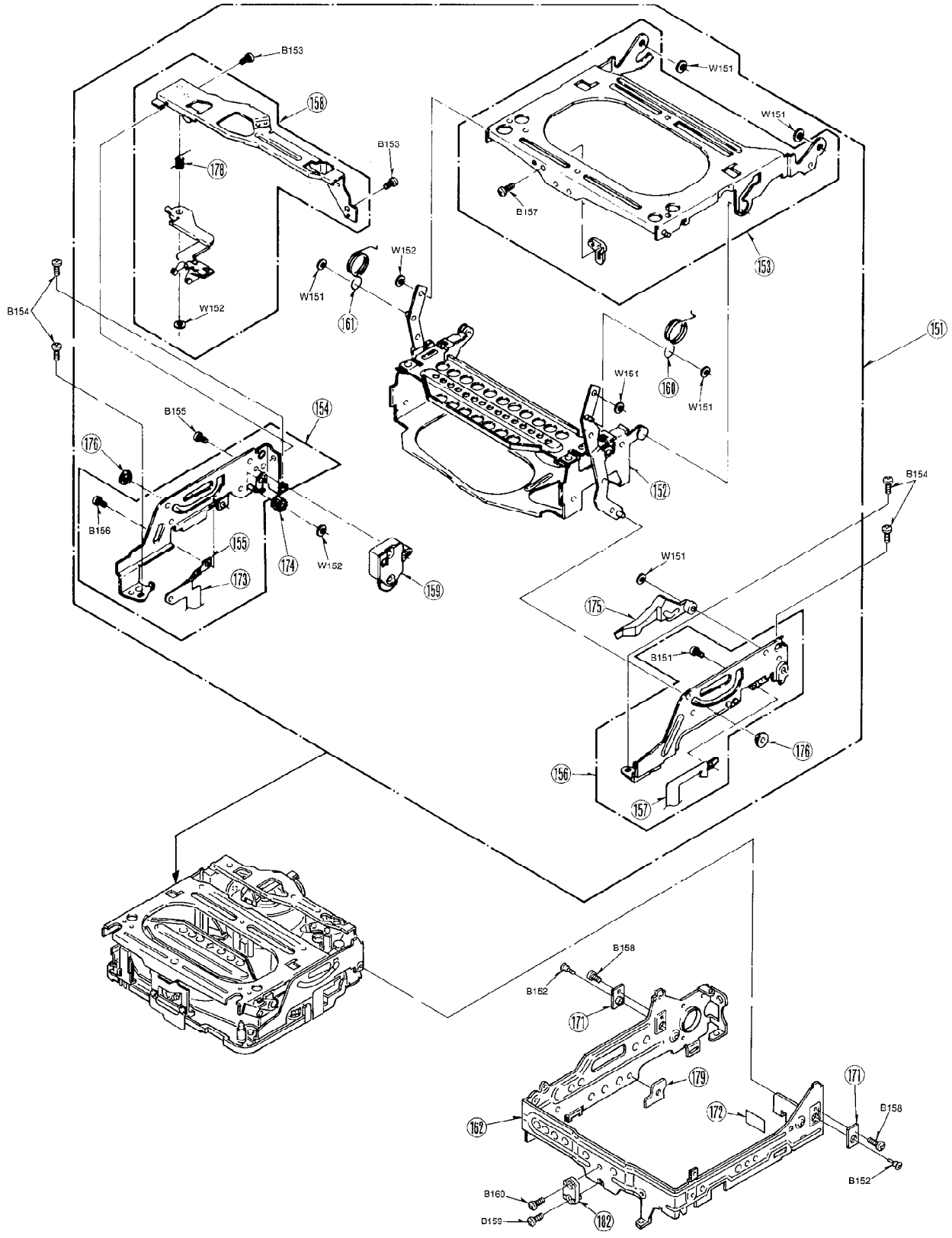
4-1. EXPLODED VIEWS ❶ VTR MECHANISM SECTION (1)



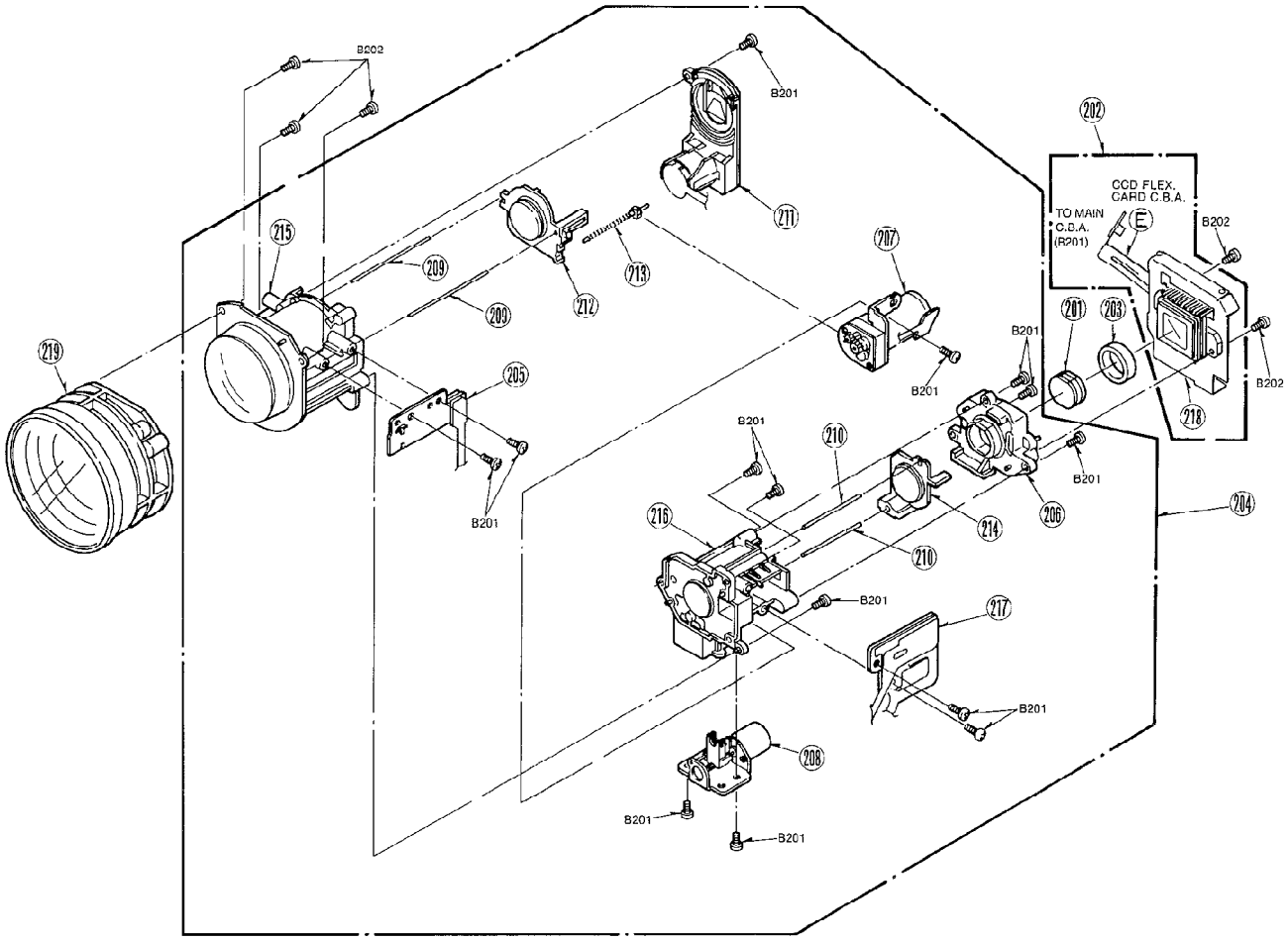
❷ VTR MECHANISM SECTION (2)



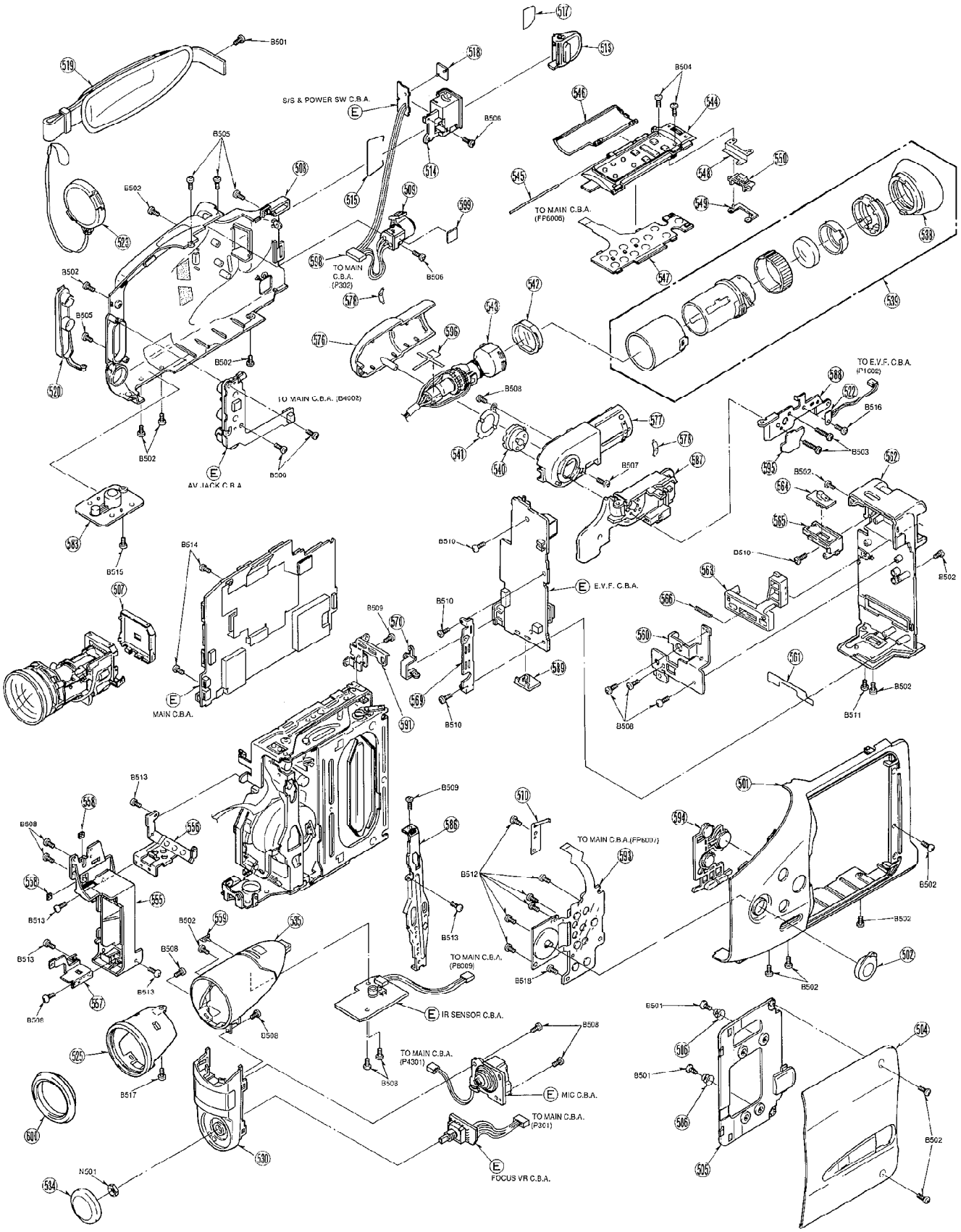
❸ VTR MECHANISM SECTION (3)



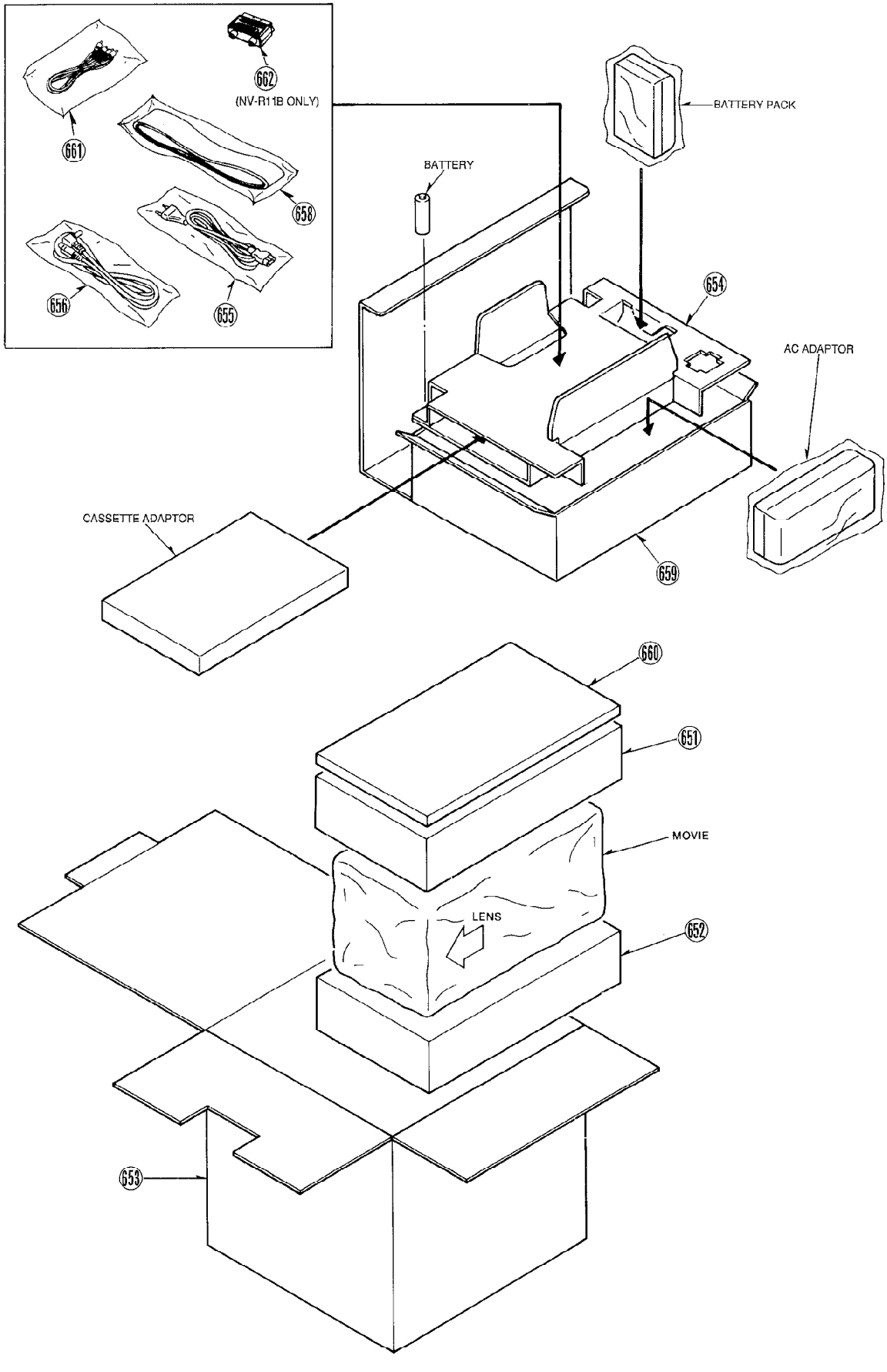
❹ CAMERA LENS SECTION



❺ FRAME & CASING PARTS SECTION



❻ PACKING PARTS & ACCESSORIES SECTION



4-2. MECHANICAL REPLACEMENT PARTS LIST

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VDR0226	REEL BASE (S)	1	
2(1)		VDG0821	BRAKE GEAR (A)	1	
3(1)		VDG0822	BRAKE GEAR (B)	1	
4(1)		VDC0823	BRAKE GEAR (C)	1	
5(1)		VEM0417	LOADING MOTOR (1) U.	1	
6(1)		VXA4527	MOTOR HOLDER U.	1	
7(1)		VEK7277	RT CONNECTOR U.	1	
8(1)		VMA8502	T-RING SLIDER	1	
9(1)		VMA8505	TEN-REG.SPRING HOOK	1	
10(1)		VMA8532	PENDULUM ARM HOLDER	1	
11(1)		VMB2362	T3 ARM SPRING	1	
12(1)		VMB2365	AC HEAD SPRING	1	
13(1)		VXA5306	S-GUIDE STAND U.	1	
14(1)		VMD1851	T-BOAT GUIDE	1	
15(1)		VSR0096	MODE SWITCH U.	1	
16(1)		VXA5001	LOCK BASE U.	1	
17(1)		VXA4517	LOADING RING U.	1	
18(1)		VMD1824	RING GUIDE	1	
19(1)		VXA4518	T-RING U.	1	
20(1)		VXA4519	S-RING U.	1	
21(1)		VFK5549	LED U.	1	
22(1)		VMD1828	T RAIL	1	
23(1)		VXA5260	T-BOAT U.	1	
24(1)		VXA4528	T4 POST U.	1	
25(1)		VXA4997	T-REEL SENSOR U.	1	
26(1)		VXA5153	S-RAIL U.	1	
27(1)		VXA5124	S-BOAT U.	1	
28(1)		VXA5201	AC HEAD U.	1	
29(1)		VXL2393	EJECT LEVER (1) U.	1	
30(1)		VXL2401	SWING ARM U.	1	
31(1)		VXL2431	T3 ARM (A) U.	1	
32(1)		VXL2139	PINCH ARM U.	1	
33(1)		VXL2140	PINCH DRIVE ARM U.	1	
34(1)		VMB2363	PINCH PRESSURE SPRING	1	
35(1)		VXL2144	PAD ARM U.	1	
36(1)		VXL2145	TEN-REG. ARM U.	1	
37(1)		VMB2364	TEN-REG. SPRING	1	
38(1)		VXL2399	IDLER U.	1	
39(1)		VXP1308	RELAY GEAR U.	1	
40(1)		VXP1313	T-DRIVE GEAR U.	1	
41(1)		VEG1175	CYLINDER U.	1	
51(1)		VMB2369	LOCK SPRING	1	
B1(1)		XQN14+B25FY	SCREW	2	
B2(1)		XQN14+A14	SCREW	2	
B3(1)		XQN14+B2	SCREW	13	
B4(1)		XQN14+BJ35	SCREW	1	
B5(1)		XQN14+B25FY	SCREW	3	
B6(1)		XQN14+B25FY	SCREW	1	
B7(1)		XQN14+B25FY	SCREW	1	
B8(1)		XQN14+C35R	SCREW	3	
B9(1)		VHD0711	SCREW	2	
B10(1)		VHD0700	SCREW	1	
B11(1)		VHD0699	SCREW	1	
B12(1)		XQN14+CF25	SCREW	2	
B13(1)		VHD0707	SCREW	1	
N1(1)		VHN0047	NUT	1	
N2(1)		VHN0175	NUT	1	
W1(1)		VMX2027	WASHER	6	
W2(1)		VMX2026	WASHER	7	
W3(1)		VMX2051	WASHER	1	
W4(1)		XWGV1223G	WASHER	2	
W5(1)		XWGV12Y3G	WASHER	3	
W6(1)		VMX2026	WASHER	1	
101(2)		VDV0232	CAPSTAN BELT	1	
104(2)		VMD1846	CAPSTAN STOPPER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
106(2)		VSH0055	REC SAFETY SW U.	1	
107(2)		VWJ0870	MECH.FLEXIBLE CARD	1	
108(2)		VXA4511	PHOTO (L) U.	1	
109(2)		VXA4514	PHOTO (R) U.	1	
110(2)		VXA4997	T-REEL SENSOR U.	1	
111(2)		VDB1129	LOWER BEARING	1	
112(2)		VEK5516	STATOR U.	1	
113(2)		VBK0059	MR HEAD	1	
114(2)		VXD0134	HOUSING U.	1	
115(2)		VXP1303	ROTOR U.	1	
119(2)		VMP4011	H.A. EARTH PLATE	1	
120(2)		VMD1042	REEL SENSOR MOUNT	1	
121(2)		ONZ170-LM	REEL SENSOR	1	
B102(2)		VHD0593	SCREW	1	
B103(2)		XQN14+B2	SCREW	1	
B104(2)		XQN14+C2R	SCREW	5	
B106(2)		XQN14+A3	SCREW	3	
B107(2)		XQN14+CF4	SCREW	1	
B108(2)		XQN14+C2	SCREW	1	
151(3)		VXA5198	GARAGE U.	1	
152(3)		VXA5199	HOLDER U.	1	
153(3)		VXA4863	GARAGE (1) U.	1	
154(3)		VXA4510	STAND (L) U.	1	
155(3)		VXA4511	PHOTO (L) U.	1	
156(3)		VXA4513	STAND (R) U.	1	
157(3)		VXA4514	PHOTO (R) U.	1	
158(3)		VXL2222	TAPE GUIDE U.	1	
159(3)		VXF1472	DUMPER	1	
160(3)		VMB2367	UP SPRING (R)	1	
161(3)		VMB2368	UP SPRING (L)	1	
162(3)		VMP4070	VIR FRAME (A)	1	
171(3)		VGQ3137	INSULATION PIECE (A)	2	
172(3)		VGQ3353	FRAME BARRIER	1	
173(3)		VWJ0548	PHOTO FLEX.CARD	1	
174(3)		VDG0827	DUMPER RELAY GEAR	1	
175(3)		VML2580	TAPE OPEN LEVER	1	
176(3)		VDP1406	ARM HOLDER	2	
178(3)		VMB2498	TAPE GUIDE SPRING	1	
179(3)		VGQ3327	FRAME SPACER	1	
182(3)		VGQ3444	INSULATION PIECE	1	
B151(3)		VHD0776	SCREW	1	
B152(3)		VHD0713	SCREW	2	
B153(3)		XQN14+B2	SCREW	2	
B154(3)		VHD0838	SCREW	4	
B155(3)		XQN16+AJ8	SCREW	1	
B156(3)		XQN14+CM2	SCREW	1	
B157(3)		XQS14+A25FZ	SCREW	1	
B158(3)		XQN2+C2	SCREW	2	
B159(3)		XQN2+CF5	SCREW	1	
B160(3)		XQN2+C25	SCREW	1	
W151(3)		VMX1042	WASHER	6	
W152(3)		VMX1061	WASHER	3	
201(4)		VDL0478	CRYSTAL FILTER	1	
202(4)		VEK7320	CCD UNIT	1	
203(4)		VMX2304	CCD CUSHION	1	
204(4)		VXW0173	LENS U.	1	
205(4)		EVAWMCJC2B14	ZOOM ENCODER U.	1	
206(4)		VDW0259	CRYSTAL MOUNT PLATE	1	
207(4)		VEM0450	ZOOM MOTOR U.	1	
208(4)		VEM0451	FOCUS MOTOR U.	1	
209(4)		VMS5384	Z GUIDE POLE	2	
210(4)		VMS5385	F GUIDE POLE	2	
211(4)		VXL2303	IRIS U.	1	
212(4)		VXP1412	2ND. MOVING FRAME U.	1	
213(4)		VXP1413	SCREW SHAFT U.	1	
214(4)		VXP1414	4TH. MOVING FRAME U.	1	
215(4)		VXQ0356	MAIN FRAME U.	1	
216(4)		VXQ0357	3RD. MOVING FRAME U.	1	
217(4)		VEK6690	LENS FLEX. U.	1	
218(4)		VSC3671	CCD SHIELD CASE	1	
219(4)		VXQ0422	WIDE LENS HOLDER U.	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
B201(4)	XQN16+CJ5	SCREW	14	
B202(4)	XQN16+CJ6	SCREW	5	
501(5)	VYK6189	SIDE CASE (R)(1) U.	1	
502(5)	VGU6793	MODE SELECT LEVER	1	
504(5)	VYK6190	CASSETTE COVER (1) U.	1	
505(5)	VGU6312	CASSETTE LOCK BUTTON	1	
506(5)	VMB2604	CASSETTE COIL SPRING	2	
507(5)	VSC4107	CCD SHIELD CASE	1	
508(5)	VYK6276	SIDE CASE (L)(1)U.	1	
509(5)	VXU1272	ZOOM BUTTON U.	1	
510(5)	VMC0969	CASSETTE HOLD SPRING	1	
513(5)	VXU1274	S/S BUTTON (1) U.	1	
514(5)	VGQ3730	S/S BUTTON HOLDER	1	
515(5)	VMB2594	S/S BUTTON COVER SPRING	1	
517(5)	VGQ3214	S/S BUTTON SHEET	1	
518(5)	VMG0833	RUBBER SW	1	
519(5)	VYC0618	GRIP BELT U.	1	
520(5)	VKF2009	AV JACK COVER	1	
522(5)	VEK7029	DEW SENSOR	1	
523(5)	VYK6251	HOOD CAP U.	1	
525(5)	VDW0292	LENS PIECE	1	
530(5)	VYK6195	FRONT CASE (1) U.	1	
534(5)	VGU6794	FOCUS KNOB	1	
535(5)	VYK6197	LENS COVER (1) U.	1	
538(5)	VMG0631	EYE CAP	1	
539(5)	VYK5508	SLIDE CASE U.	1	
540(5)	VGQ3122	ROTARY PIECE	1	
541(5)	VMC0977	ROTATION LOCK SPRING	1	
542(5)	VKW1806	PROTECTION PANEL	1	
543(5)	M01KUA07WB04	CRT U.	1	
544(5)	VXU1204	TOP OPERATION PANEL (1) U.	1	
545(5)	VMS5382	SHAFT	1	
546(5)	VKF2139	TOP DOOR	1	
547(5)	ESU39009	VTR OPERATION U.	1	
548(5)	VSC3918	EARTH ANGLE	1	
549(5)	VGL0563	PANEL LIGHT	1	
550(5)	VGU6344	CAM/VTR SELECT BUTTON	1	
555(5)	VMD2319	LENS FRAME	1	
556(5)	VMP4072	SUPPORT ANGLE	1	
557(5)	VMP4284	FRONT ANGLE	1	
558(5)	VHN0057	CASE FIX. ANGLE	2	
559(5)	VKF2276	MIC CAP	1	
560(5)	VMP4239	REAR CASE FIX. ANGLE	1	
561(5)	VMZ2179	REAR SHEET	1	
562(5)	VKM3680	REAR CASE	1	
563(5)	VGQ3380	BATTERY LOCK	1	
564(5)	VGU6494	EJECT KNOB	1	
565(5)	VGQ3381	EJECT KNOB HOLDER	1	
566(5)	VMB2683	BATTERY LOCK SPRING	1	
569(5)	VMP4062	CASE (R) FIX. ANGLE	1	
570(5)	VMP4075	DC JACK HOLD ANGLE	1	
576(5)	VKM3682	EVF CASE (L)	1	
576(5)	VKM3682	EVF CASE (L)	1	
577(5)	VKM3681	EVF CASE (R)	1	
578(5)	VMC0978	SLIDE SPRING	2	
583(5)	VYQ0998	TRIPOD FRAME U.	1	
586(5)	VMP4286	VTR FRAME (B)	1	
587(5)	VGQ3383	EVF FIXING PIECE	1	
588(5)	VMP4238	EVF FIXING PLATE	1	
589(5)	VGU6495	POWER SAVE KNOB	1	
591(5)	VMP4509	VTR FRAME (C)	1	
593(5)	ESU39021	CAMERA OPERATION UNIT	1	
594(5)	VGU6792	CAM. OPE. BUTTON	1	
595(5)	VMZ2275	EVF FIXING PIECE BARRIER	1	
596(5)	VMZ2274	EVF BARRIER	1	
598(5)	VEE9215	S/S, ZOOM CONNECTOR CABLE	1	
599(5)	VMZ2277	ZOOM BUTTON BARRIER	1	
600(5)	VDW0303	LENS HOOD	1	
B501(5)	VHD0794	SCREW	3	
B502(5)	VHD0729	SCREW	14	
B503(5)	VHD0689	SCREW	2	
B504(5)	XQN2+CF55FZ	SCREW	2	
B505(5)	XQN2+CF8FZ	SCREW	5	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
B506(5)	XQN2+CJ8	SCREW	4	
B507(5)	XQN2+CJ8FZ	SCREW	1	
B508(5)	XQN2+CJ4	SCREW	13	
B509(5)	XQN2+C25	SCREW	2	
B510(5)	XTB2+6G	SCREW	4	
B511(5)	XQN2+C3FZ	SCREW	1	
B512(5)	XTB2+4J	SCREW	6	
B513(5)	XQN2+CF4	SCREW	5	
B514(5)	XTB2+5F	SCREW	2	
B515(5)	XQN2+C2	SCREW	1	
B516(5)	XQN2+CF3	SCREW	1	
B517(5)	XQN2+CJ3	SCREW	1	
B518(5)	XTB2+3J	SCREW	1	
N501(5)	XNS9	NUT	1	
651(6)	VPN4063	CUSHION (UPPER)	1	
652(6)	VPN4064	CUSHION (LOWER)	1	
653(6)	VPG7746	PACKING	1	NV-R11B
653(6)	VPG7747	PACKING	1	NV-R11A
654(6)	VPN4134	ACCESSORIES PAD	1	
655(6)	VJA0754	AC CORD	1	<!>NV-R11A
655(6)	VJA0733	AC CORD	1	<!>NV-R11B
656(6)	VJA0769	DC OUTPUT CABLE	1	
658(6)	VPC1830	SHOLDER STRAP	1	
659(6)	VPN4065	ACCESSORIES BOX	1	
660(6)	VQT5917	OPERATING INSTRUCTIONS (ENGLISH)	1	<!>NV-R11B
660(6)	VQT5940	OPERATING INSTRUCTIONS (ENGLISH)	1	<!>NV-R11A
661(6)	VFA0039	AV CORD	1	
662(6)	VFA0152	21 PIN ADAPTOR	1	NV-R11B
		****** JIG & TOOLS *****		
		-------- ELECTRICAL -------		
	VFM8180HUPF	VHS-C ALIGMENT TAPE	1	PAL
	VFK0374	COLOUR TEMP.CONV.FILRTER	1	(C12) OR VFK0713
	VFK0375	COLOUR TEMP.CONV.FILRTER	1	(CZ) OR VFK0716
	VFK0644	EVR FIXTURE	1	
	VFK0701ROM28	ROM	1	
	VFK0766A	EVR CONNECTION CABLE 5P	1	
	VFK0734W	MEASURENT CABLE 24P	1	
	VFK0670	FLAT CABLE 18P	2	
	VFK0728	FLAT CABLE 9P	1	
	VFK0729	FLAT CABLE 6P	1	
	VFK0929	EXTENSION CABLE 12P	1	
	VFK0839	EXTENSION CABLE 30P	1	
	VFK0896	FLAT CABLE 23P	1	
	VFK0913	FLAT CABLE 18P	1	
	VFKW0F0001	COMMON CABLE	1	
	VFKW0F0139	ATTACHMENT CABLE	1	
	VFKW0F0140	ATTACHMENT CABLE	1	
		------ MECHANICAL ------		
	VFK0743	H-POSITION ADJUSTMENT	1	
	VFK0824	ASTERISK TYPE RENCH	1	
	VFK0335	RETAINING RING REMOVER	1	
	VFK0329	POST ADJ. SCREW DRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLTONE GREASE	1	

4-3. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE : Components identified with the mark (!) have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4.The P.C.Board units marked width'■'show below the main assembled parts.
5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP23233F	CAMERA/MAIN C.B.A.	1	(RTL)
			(Page:4-9)		
		VEP28106A	E.V.F. C.B.A.	1	(RTL)
			(Page:4-15)		
		VEP22140B	CCD FLEX. CARD C.B.A.	1	(RTL)
			(Page:4-16)		
		VEK6690	LENS FLEX. CARD C.B.A.	1	(RTL)
			(Page:4-16)		
		VEP00V02A	FOCUS VR C.B.A.	1	(RTL)
			(Page:4-16)		
		VEK7311	MIC C.B.A.	1	(RTL)
			(Page:4-16)		
		VEP04457D	AV JACK C.B.A.	1	(RTL)
			(Page:4-16)		
		VEP00V80A	S/S C.B.A.	1	(RTL)
			(Page:4-16)		
		VEP00V61A	IR SENSOR C.B.A.	1	(RTL)
			(Page:4-16)		
	■	VEP23233F	CAMERA/MAIN C.B.A.		(RTL)
B201		VJP3358A012	CONNECTOR (MALE) 12P	1	
B401		VJP2952A024	CONNECTOR (MALE) 24P	1	
B1001		VJS2961A030	CONNECTOR (FEMALE) 30P	1	
B4002		VJP3295D010	CONNECTOR (MALE) 10P	1	
C201		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C202		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C203		ECST0JX226Z	T.CAPACITOR 6.3V 22U	1	
C204		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C205		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C206-12		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	7	
C213		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C214		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C218		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C219		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C220		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C221		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C222		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C223		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C224		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C225		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C226		ECST1CY475Z	E.CAPACITOR CH 16V 47U	1	
C227		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C228		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C229		ECST1GX155Z	T.CAPACITOR CH 40V 1.5U	1	
C230		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C231,32		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C233-36		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	4	
C238		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C302		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C303		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C304		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C305		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C306		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C307		ECUX1H060CCV	C.CAPACITOR CH 50V 6P	1	
C308		ECRJA010A11R	V.CAPACITOR	1	
C309		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C310		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C311		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C312,13		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C314		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C315		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C317		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C321		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C402		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C403		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C404,05		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C406-09		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C410		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C412		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C413		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C414,15		ECST0JY106Z	T.CAPACITOR 6.3V 10U	2	
C416		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C417,18		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	2	
C701		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C702		ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
C703		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C704		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C705		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C706,07		ECST0JY106Z	T.CAPACITOR 6.3V 10U	2	
C708,09		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	
C711		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C712		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C713		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C715		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C719		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C720		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C721		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C722		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C724,25		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C729		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C731		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C732		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C737		ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C750		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C1001		ECUM1C335ZFM	C.CAPACITOR CH 16V 3.3U	1	
C1002		ECGC1BB4R7	C.CAPACITOR CH 8V 4.7U	1	
C1003		ECGC0KB8R2	C.CAPACITOR CH 8V 8.2U	1	
C1004		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C1005		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C1007		ECEV0SA470	E.CAPACITOR 4V 47U	1	
C1008		ECGC0KB8R2	C.CAPACITOR CH 8V 8.2U	1	
C1009		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C1010		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C1012		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C1014		ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C1017		ECUX1E105KB	C.CAPACITOR CH 25V 1U	1	
C1019		ECUM1E474ZFM	C.CAPACITOR CH 25V 0.47U	1	
C1020		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C1022		ECUM1H104ZFN	C.CAPACITOR CH 50V 1U	1	
C1024		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C1025		ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
C1026		ECEV1HA010	E.CAPACITOR CH 50V 1U	1	
C1027		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C1028		ECEV1HAR47	E.CAPACITOR CH 50V 0.47U	1	
C1029		ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1030		ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C1031		ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1032		ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C1033-35		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	3	
C1036		ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1037		ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C1040,41		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C1042		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C1051		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C1057		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C1064		ECEV1AG330S	E.CAPACITOR CH 10V 33U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1066		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2001		ECEV1HA010	T.CAPACITOR 16V 1U	1	
C2002		ECST1CY105Z	T.CAPACITOR 16V 1U	1	
C2003		ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C2004		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C2005		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C2007		ECST1CY105Z	T.CAPACITOR 16V 1U	1	
C2009		ECUX1A104KBV	C.CAPACITOR CH 10V 0.1U	1	
C2010		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C2011		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C2012,13		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C2014		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C2015-17		ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	3	
C2018		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C2020-22		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C2023		ECUM1C105MBM	C.CAPACITOR CH 16V 1U	1	
C2025-27		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	3	
C2028		ECEV0JA220	T.CAPACITOR 6.3V 22U	1	
C2029		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C2033		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C2040-42		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	3	
C2043		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C2070		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C3001		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C3002		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C3003		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C3004		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C3005		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C3008		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C3010		ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C3012		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3013		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C3015		ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C3017		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C3018		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C3019		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3020		ECEV0GA471	E.CAPACITOR 4V 470U	1	
C3021		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3022		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C3023		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3026		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3027		ECUM1C223KBV	C.CAPACITOR CH 16V 0.022U	1	
C3028		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3029		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3030		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C3032		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3035		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C3036		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3037		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C3038		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3039,40		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C3041		ECST0JX226Z	T.CAPACITOR 6.3V 22U	1	
C3042		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3044		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C3045		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C3051		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C3059		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C3061		ECUX1HZ21JCV	C.CAPACITOR CH 50V 220P	1	
C4001,02		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4006,07		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4008		ECEV0JA220	E.CAPACITOR 6.3V 22P	1	
C4009		ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
C4010		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4011		ECST0JX226Z	T.CAPACITOR 6.3V 22U	1	
C4012		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C4013		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4014		ECUM1C223KBV	C.CAPACITOR CH 16V 0.022U	1	
C4015		ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
C4016		ECUM2A472JCM	C.CAPACITOR 100V 4700P	1	
C4017		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4018		ECUX1H122KBV	C.CAPACITOR CH 50V 1200P	1	
C4019		ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C4020		ECUX1C153KBV	C.CAPACITOR CH 16V 0.015U	1	
C4021		ECST1CY335Z	T.CAPACITOR 16V 3.3U	1	
C4022		ECEV0JA470	E.CAPACITOR 4V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4023		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C4024		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C4025		ECEV1CA100	E.CAPACITOR 16V 10U	1	
C4026		ECST1VY334Z	T.CAPACITOR CH 35V 0.33U	1	
C4027		ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C4028		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4029		ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C4030		ECUX1H562KBV	C.CAPACITOR CH 50V 5600P	1	
C4031		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4032		ECEV1HA010	E.CAPACITOR CH 50V 1U	1	
C4033		ECUX1H562KBV	C.CAPACITOR CH 50V 5600P	1	
C4034		ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C4035		ECEV1HA010	E.CAPACITOR CH 50V 1U	1	
C4036		ECEV0JA220	E.CAPACITOR 6.3V 22U	1	
C4037		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4301		ECUV1C823KBN	C.CAPACITOR CH 16V 0.082U	1	
C4303		ECUX1C273KBV	C.CAPACITOR CH 16V 0.027U	1	
C4304		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4305,06		ECUX1C273KBV	C.CAPACITOR CH 16V 0.027U	2	
C4307		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C5001-04		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C5005-08		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	4	
C5009,10		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C5011		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C5012		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C5013		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C5014		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C5016		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C5018		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C5019		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C5020,21		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C5022		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C5023,24		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C5025		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C5026		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C5027		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C5501		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C5502		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C5505		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C5506		ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
C5507-11		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	5	
C5512		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C5513		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C5514		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C5515		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C5518		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C5519,20		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	2	
C5521-25		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	5	
C5526		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
C5527		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C5529		ECUM1C683KBV	C.CAPACITOR CH 16V 0.068U	1	
C5530		ECST0JY475Z	T.CAPACITOR 6.3V 4.7U	1	
C5531		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
C5532		ECEV0JA470	E.CAPACITOR 4V 47U	1	
C5533,34		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C5535		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C5536		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C5537		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C5538		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C5539		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C5540		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C5541		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C5545		ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C6001-04		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	4	
C6005		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C6006,07		ECUX1H100CCV	C.CAPACITOR CH 50V 10P	2	
C6008-11		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	4	
C6012		ECUM1H070CCV	C.CAPACITOR CH 50V 7P	1	
C6013		ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C6014,15		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C6016		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C6017		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C6018		ECEV1CA470P	E.CAPACITOR 16V 47U	1	
C6019		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C6020		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6022,23		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C6025		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C6027		ECEV0GA101	E.CAPACITOR 4V 100U	1	
C6030		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6031,32		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C6038		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C6039		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6040		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C6060		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6061		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C6100		ECEV1CA100	E.CAPACITOR 16V 10U	1	
C6201,02		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C6203		ECEV1CA100	E.CAPACITOR 16V 10U	1	
C6204		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C6205		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C6206		ECEV0GA101	E.CAPACITOR 4V 100U	1	
C6207		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C6208		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C6209		ECEV0JA220	E.CAPACITOR 6.3V 22P	1	
C6210		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C6501		ECST0JY106Z	T.CAPACITOR 6.3V 10U	1	
C6502		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C6503		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C6504		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
D201,02		1SS355	DIODE	2	
D203		MA728	DIODE	1	
D204		1SS355	DIODE	1	
D481,82		MA728	DIODE	2	
D701		MA132A	DIODE	1	
D1002		SFPB-76	DIODE	1	
D1006,07		MA132K	DIODE	2	
D1015		U1FWJ44N	DIODE	1	
D3002		MA729	DIODE	1	
D3003		1SS355	DIODE	1	
D5001		MA132WA	DIODE	1	
D5002		MA132WA	DIODE	1	
D5003-05		1SS355	DIODE	3	
D6006		MA728	DIODE	1	
D6008		1SS355	DIODE	1	
D6009		MA132WK	DIODE	1	
D6011		MA132WK	DIODE	1	
D6012,13		MA132WA	DIODE	2	
D6016		MA133	DIODE	1	
D6018		MA728	DIODE	1	
D6501-03		1SS355	DIODE	3	
D6550		MA132WA	DIODE	1	
FL201		ELB3H009	FILTER	1	
FL3002		VLF1067	FILTER	1	
FL3003		ELB4B559	FILTER	1	
FP701		VJS3319D018	CONNECTOR (FEMALE) 18P	1	
FP2001		VJS2848D007	CONNECTOR (FEMALE) 7P	1	
FP2002		VJS2958B018	CONNECTOR (FEMALE) 18P	1	
FP4001		VJS2958D009	CONNECTOR (FEMALE) 9P	1	
FP5001		VJS2959B013	CONNECTOR (FEMALE) 13P	1	
FP6001		VJS2959B018	CONNECTOR (FEMALE) 18P	1	
FP6002		VJS2959B006	CONNECTOR (FEMALE) 6P	1	
FP6006		VJS2959D011	CONNECTOR (FEMALE) 11P	1	
FP6007		VJS2848D010	CONNECTOR (FEMALE) 10P	1	
IC201		MN5224	IC	1	
IC202		MB87882PFV	IC	1	
IC203		NN2037FAQ	IC	1	
IC204		TA75W01FU	IC	1	
IC205		NJM2904V	IC	1	
IC301		TC9084F	IC	1	
IC302		M62356GP	IC	1	
IC303		M62357GP	IC	1	
IC305		CXD2300Q	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC306		SC7S04F	IC	1	
IC307		TC4W53F	IC	1	
IC308		TC7S14FU	IC	1	
IC705		BA6950FS	IC	1	
IC706		NJM2115V	IC	1	
IC707		LM324DB	IC	1	
IC708		TB6512AF	IC	1	
IC710		MN1882421M	IC	1	
IC711		TA75W01FU	IC	1	
IC1001		BA9706K	IC	1	
IC2001		TB6518F	IC	1	
IC2002,03		UN224	IC	2	
IC3001		M5Z381FP	IC	1	
IC4001		BA7758FS	IC	1	
IC5001		AN3355FHP	IC	1	
IC5501		TL8850F	IC	1	
IC6001		MN6755486M	IC	1	
IC6002		MM1273XFF	IC	1	
IC6003		BU6140FV	IC	1	
IC6004		AK6440HF	IC	1	
IC6005		BA6289F	IC	1	
IC6006		TA75W393FU	IC	1	
IC6007		TC4W53F	IC	1	
IC6008		TC7W04F	IC	1	
IC6501		UPD4538BG	IC	1	
L201		VLQ0426J220	COIL 22UH	1	
L202		VLQ0426J600	COIL 60UH	1	
L203		VLQ0426J820	COIL 82UH	1	
L204		ELJFA220JB	COIL	1	
L206,07		ELJFC150JB	COIL 15UH	2	
L208		VLQ0163J220	COIL 22UH	1	
L209-11		VLP0154	COIL	3	
L212		VLQ0426J270	COIL 27UH	1	
L213		VLP0146	COIL	1	
L302		ELJPA220KB	COIL	1	
L303		VLQ0426J100	COIL 10UH	1	
L304		ELJPC6R8KB	COIL 6.8UH	1	
L305		VLP0140	COIL	1	
L306,07		VLP0175	COIL H	2	
L308		VLP0140	COIL	1	
L309		VLP0171	COIL	1	
L310		VLP0175	COIL H	1	
L311		VLP0171	COIL	1	
L402		ELJPA220KB	COIL	1	
L403		VLQ0426J220	COIL 22UH	1	
L404		VLQ0426J4R7	COIL 4.7UH	1	
L405		VLQ0426J220	COIL 22UH	1	
L406		VLP0140	COIL	1	
L701		ELJPC6R8KB	COIL 6.8UH	1	
L703		ELJPC6R8KB	COIL 6.8UH	1	
L704-06		ELJPA220KB	COIL	3	
L707		ELJPC6R8KB	COIL 6.8UH	1	
L708		ELJPA220KB	COIL	1	
L1001		ELL04T502R	COIL	1	
L1002		ELL04T016R	COIL H	1	
L1003		ELC5SB4R7MA	COIL H	1	
L1006		ELJPA150KB	COIL	1	
L1007		ELL04T027R	COIL	1	
L1008		ELC5SB4R7MA	COIL H	1	
L1010		ELJPA100KB	COIL	1	
L1011		ELJPA101KB	COIL	1	
L1012		ELJPA100KB	COIL	1	
L1014		ELJPA100KB	COIL	1	
L1015		ELJPA470KB	COIL	1	
L1062		ELL04T009R	COIL	1	
L3001		ELJFA680JB	COIL	1	
L3004		ELJFC150JB	COIL 15UH	1	
L3005		ELJPA150KB	COIL	1	
L3006		VLQ0426J220	COIL 22UH	1	
L3007		VLQ0426J150	COIL 15UH	1	
L3008		ELJPA150KB	COIL	1	
L3009		VLQ0426J470	COIL 47UH	1	
L3010		VLQ0163J151	COIL 150UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L3011		VLQ0426J330	COIL 33UH	1	
L3023		VLQ0426J470	COIL 47UH	1	
L3051		VLQ0426J330	COIL 33UH	1	
L4005		ELJPA101KB	COIL	1	
L5001-05		ELJPA101KB	COIL	5	
L5501		ELJPA150KB	COIL	1	
L5502		VLQ0426J150	COIL 15UH	1	
L5503		VLQ0426J270	COIL 27UH	1	
L5504,05		VLQ0426J470	COIL 47UH	2	
L5507		ELJFA101JB	COIL	1	
L5509		VLQ0426J330	COIL 33UH	1	
L5510		VLQ0163J4R7	COIL H	1	
L5511		ELJPA101KB	COIL	1	
L5512		VLQ0426J3R9	COIL 3.9UH	1	
L6002		VLQ0319K101	COIL 100UH	1	
L6005		VLP0175	COIL H	1	
P301		VJP3172B008	CONNECTOR (MALE) 8P	1	
P302		VJP3172B006	CONNECTOR (MALE) 6P	1	
P4301		VJP3172B002	CONNECTOR (MALE) 2P	1	
P6009		VJP3172B003	CONNECTOR (MALE) 3P	1	
PP3001		VJP3358C016	CONNECTOR (MALE) 16P	1	
Q201,02		2SD2216	TRANSISTOR	2	
Q203		2SB1462	TRANSISTOR	1	
Q204		2SB970X	TRANSISTOR	1	
Q206		XP4501	TRANSISTOR-RESISTOR	1	
Q207		2SB1462	TRANSISTOR	1	
Q401		2SB1462	TRANSISTOR	1	
Q402		2SD2216	TRANSISTOR	1	
Q404		XP4501	TRANSISTOR-RESISTOR	1	
Q481		XP1212	TRANSISTOR-TRANSISTOR	1	
Q704		2SD601A	TRANSISTOR	1	
Q705		2SD2216	TRANSISTOR	1	
Q1001		2SA1731-R	TRANSISTOR	1	
Q1003		MPL1	TRANSISTOR	1	
Q1004		2SD2210	TRANSISTOR	1	
Q1062		MPL1	TRANSISTOR	1	
Q3001,02		2SD2216	TRANSISTOR	2	
Q3003,04		2SC4627	TRANSISTOR	2	
Q3005		2SB1462	TRANSISTOR	1	
Q3006		2SD2216	TRANSISTOR	1	
Q3012		2SD2216	TRANSISTOR	1	
Q3014		2SD2216	TRANSISTOR	1	
Q3015		2SB1462	TRANSISTOR	1	
Q3016		2SC4627	TRANSISTOR	1	
Q3017,18		2SB1462	TRANSISTOR	2	
Q4001		2SD2216	TRANSISTOR	1	
Q4002		MSD602-R	TRANSISTOR	1	
Q4003		2SB1219	TRANSISTOR	1	
Q4004		2SB1462	TRANSISTOR	1	
Q4005		XP6501	TRANSISTOR-RESISTOR	1	
Q4006		2SD2216	TRANSISTOR	1	
Q4009		2SD2216	TRANSISTOR	1	
Q4301		2SD1819A	TRANSISTOR	1	
Q4302,03		2SD2216	TRANSISTOR	2	
Q5001,02		XN4504	TRANSISTOR-TRANSISTOR	2	
Q5003		2SA812	TRANSISTOR	1	
Q5502		2SD2216	TRANSISTOR	1	
Q5503		2SC4627	TRANSISTOR	1	
Q5507,08		XP4601	TRANSISTOR-RESISTOR	2	
Q5509		2SB1462	TRANSISTOR	1	
Q6002		2SD2216	TRANSISTOR	1	
Q6004		2SB1462	TRANSISTOR	1	
Q6005		XP6501	TRANSISTOR-RESISTOR	1	
Q6006		2SB1462	TRANSISTOR	1	
Q6201		2SB1462	TRANSISTOR	1	
Q6501		2SB1462	TRANSISTOR	1	
QR201		MRN1104	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR401		MRN1103	TRANSISTOR-RESISTOR	1	
QR402		MRN1102	TRANSISTOR-RESISTOR	1	
QR403		MRN1104	TRANSISTOR-RESISTOR	1	
QR701		MRN1102	TRANSISTOR-RESISTOR	1	
QR710		MRN1104	TRANSISTOR-RESISTOR	1	
QR1001		MRN2102	TRANSISTOR-RESISTOR	1	
QR1061		MRN2111	TRANSISTOR-RESISTOR	1	
QR2002		MRN1111	TRANSISTOR-RESISTOR	1	
QR3001		MRN1103	TRANSISTOR-RESISTOR	1	
QR3004		MRN1102	TRANSISTOR-RESISTOR	1	
QR3007		XP1212	TRANSISTOR-TRANSISTOR	1	
QR3008		UN2130X	TRANSISTOR RESISTOR	1	
QR3009		UN2130X	TRANSISTOR-RESISTOR	1	
QR4001		MRN1103	TRANSISTOR-RESISTOR	1	
QR6002		XP4213	TRANSISTOR-RESISTOR	1	
QR6003		MRN2103	TRANSISTOR-RESISTOR	1	
QR6004		XP4115	TRANSISTOR-RESISTOR	1	
QR6005		MRN1104	TRANSISTOR-RESISTOR	1	
QR6007		MRN1102	TRANSISTOR-RESISTOR	1	
QR6010		XP1213	TRANSISTOR-RESISTOR	1	
QR6014		UN921D	TRANSISTOR-RESISTOR	1	
QR6015		MRN1111	TRANSISTOR-RESISTOR	1	
QR6050		XP1211	TRANSISTOR-RESISTOR	1	
QR6501,02		MRN1104	TRANSISTOR-RESISTOR	2	
QR6550		MRN1104	TRANSISTOR-RESISTOR	1	
R201		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R202		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R203		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R204		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R206		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R209		ERJ2GE0R00	M.RESISTOR CH 2W 0	1	
R210		VRE0082A223	M.RESISTOR CH 1/10W 22K	1	
R211		VRE0082A183	M.RESISTOR CH 1/10W 18K	1	
R212		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R213		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R214		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R215		VRE0082A753	M.RESISTOR CH 1/10W 75K	1	
R216		VRE0082A153	M.RESISTOR CH 1/10W 15K	1	
R217		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R218		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R219		ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R220		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R221		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R222,23		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R224		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R225		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R226		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R228		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R229		VRE0082A153	M.RESISTOR CH 1/10W 15K	1	
R231		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R232		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R235		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R236		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R237		ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R238		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R239		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R240,41		ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R242		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R243		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R245		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R246		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R249		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R250		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R252		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R301		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R302		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R303		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R304		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R305,06		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R307		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R308		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R309		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R310,11		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R312	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R313	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R314	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R317,18	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R321	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R322,23	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R324,25	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R327	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R402	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R403	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R404	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R405	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R406	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R407-09	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	3	
R410	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R411	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R412	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R413	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R414	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R415	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R417,18	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R419	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R420	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R481	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R483	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R702	VRE0082A102	M.RESISTOR CH 1/10W 1K	1	
R703	VRE0082A152	M.RESISTOR CH 1/10W 1.5K	1	
R704	VRE0082A471	M.RESISTOR CH 1/10W 470UH	1	
R705,06	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R716	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R717	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R718	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R719	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R720,21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R722	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R723	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R724	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R725	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R726	ERJ3GEYG202	M.RESISTOR CH 1/16W 2K	1	
R727	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R728	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R729	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R730	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R731,32	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R733	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R734,35	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	2	
R736	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R737	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R738	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R739	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R740	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R741	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R742	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R743,44	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R745,46	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R747,48	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R749	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R750	ERJ3GEYG303	M.RESISTOR CH 1/16W 30K	1	
R752	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R756	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R757,58	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R760	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R761	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R764	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R770,71	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R772	ERJ3GEYG473	M.RESISTOR CH 1/16W 47K	1	
R773	ERJ3GEYG683	M.RESISTOR CH 1/16W 68K	1	
R775	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R777	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R778	VRE0082A223	M.RESISTOR CH 1/10W 22K	1	
R779	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R781	VRE0082A103	M.RESISTOR CH 1/10W 10K	1	
R782	VRE0082A681	M.RESISTOR CH 1/10W 680	1	
R1001	VRE0034E822	M.RESISTOR CH 1/10W 8.2K	1	
R1002	VRE0034E272	M.RESISTOR CH 1/10W 2.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1005	VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R1006	VRE0034E272	M.RESISTOR CH 1/10W 2.7K	1	
R1007	ERJ8GEYJ330	M.RESISTOR CH 1/8W 33	1	
R1008	VRE0034E223	M.RESISTOR CH 1/10W 22K	1	
R1009	VRE0034E152	M.RESISTOR CH 1/10W 1.5K	1	
R1012	VRE0067G20C	M.RESISTOR CH 1/10W	1	
R1013	VRE0067G393	M.RESISTOR CH 1/10W 39K	1	
R1014,15	VRE0067G182	M.RESISTOR CH 1/10W 1.8K	2	
R1016	VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R1017	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R1018	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R1019	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R1020	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R1021	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R1022	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
R1023	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R1024	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R1025	ERJ6GEYJ10Z	M.RESISTOR CH 1/10W 1K	1	
R1035	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R1038	VRE0071E750	M.RESISTOR CH 1/10W 75UH	1	
R1039	VRE0071E391	M.RESISTOR CH 1/10W 390UH	1	
R1040	VRE0071E121	M.RESISTOR CH 1/10W 120UH	1	
R1051	VRE0034E243	M.RESISTOR CH 1/10W 2.4K	1	
R1052	VRE0034E393	M.RESISTOR CH 1/10W 39K	1	
R1063	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R1065	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R1071	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R1072	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1073	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1080	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R2001	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R2002	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R2003	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2004	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R2005	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R2007	ERJ8GEYJR47	M.RESISTOR CH 1/8W 0.47	1	
R2008	ERJ8GEYJR33	M.RESISTOR CH 1/8W 0.33	1	
R2009	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R2010	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R2012	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
R2015	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2016	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2017	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R2018	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R2019,20	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	2	
R2021	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R2022	ERJ8GEYJR33	M.RESISTOR CH 1/8W 0.33	1	
R2024	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R2040-42	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	3	
R3001	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R3002	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R3003	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R3004	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R3005	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3006	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3007	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R3008	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R3009	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3010	VRE0082A561	M.RESISTOR CH 1/10W 560	1	
R3011	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R3012	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R3014	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R3015	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3016	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R3017	ERJ3GEYJ620	M.RESISTOR CH 1/16W 62	1	
R3018	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R3019	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R3020	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R3021	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R3022	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R3023	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R3024	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R3025	VRE0082A681	M.RESISTOR CH 1/10W 680	1	
R3026	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3027	VRE0082A181	M.RESISTOR CH 1/10W 180UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3028		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R3029		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R3033		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R3034		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3035		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3036		VRE0082A331	M.RESISTOR CH 1/10W 330UH	1	
R3037		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R3038		VRE0082A122	M.RESISTOR CH 1/10W 1.2K	1	
R3039		VRE0082A152	M.RESISTOR CH 1/10W 1.5K	1	
R3040		ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R3041		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R3042		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R3043		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R3044		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R3045		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R3046		ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R3047,48		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R3049		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R3051		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R3052		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R3053		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R3054		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R3055		VRE0082A182	M.RESISTOR CH 1/10W 1.8K	1	
R3056		ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R3057-59		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R3061		VRE0082A682	M.RESISTOR CH 1/10W 6.8K	1	
R3063		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R3067		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3068		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R3069		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R3071		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4001		ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R4002		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4003		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R4004		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4006		ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R4007		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4008		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R4009		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R4010		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R4011		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4012		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4013		ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R4014		VRE0071E153	M.RESISTOR CH 1/10W 15K	1	
R4016,17		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	2	
R4018		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R4019		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4020		VRE0071E431	M.RESISTOR CH 1/10W 430	1	
R4021		VRE0071E562	M.RESISTOR CH 1/16W 5.6K	1	
R4022		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4023		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R4024		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4025		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4026		ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R4027,28		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R4029		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R4030,31		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R4032		VRE0071E272	M.RESISTOR CH 1/10W 2.7K	1	
R4033		VRE0071E152	M.RESISTOR CH 1/10W 1.5K	1	
R4034,35		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R4036,37		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R4038		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4039		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4040		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4048		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4301		VRE0071E821	M.RESISTOR CH 1/10W 820	1	
R4302		VRE0071E222	M.RESISTOR CH 1/10W 2.2K	1	
R4303		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R4304		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4305		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R4306		ERJ6GEYJ132	M.RESISTOR CH 1/10W 1.3K	1	
R4307		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R4308,09		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	2	
R4310		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R4311		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R5001		ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R5002,03		ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
R5004		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R5005		ERJ3GEYJ113	M.RESISTOR CH 3W 11K	1	
R5007		ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R5008		ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7	1	
R5009		ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	1	
R5501		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R5502		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R5503		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R5504,05		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R5506		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R5507		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R5508		ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R5509		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R5512		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R5513		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R5514		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R5515		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R5518		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R5519		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R5520		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R5524		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R5525		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R5526		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R5529		ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R5530		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R5533		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R5534		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R5536		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R5537		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R5538		ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R5540		ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R5541		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R5546		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R5547		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R6001		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R6003		ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	1	
R6004		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R6005		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R6006		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6007		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R6008		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R6009		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6010,11		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R6012		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6013		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6014		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6015		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6016		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R6017-19		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	3	
R6020		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6021		ERJ8GEYJ120	M.RESISTOR CH 1/8W 12	1	
R6022		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R6023		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6024		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6025,26		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R6027		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R6029		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6030		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6031		ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R6032		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R6033		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6034		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R6035		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6036		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6037,38		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R6039		ERJ8GEYJ2R2	M.RESISTOR CH 1/8W 2.2	1	
R6042		ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R6043		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6044		VRE0082A223	M.RESISTOR CH 1/10W 22K	1	
R6045		VRE0082A333	M.RESISTOR CH 1/10W 33K	1	
R6046		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R6047		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6048-50		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6051-53		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	3	
R6054		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6055,56		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R6057		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6058		ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R6059		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6060		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6061		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6062		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6063		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6064		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R6065		ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R6066		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6067		ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R6068		ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R6069		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R6070		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R6071		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6072		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R6073		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6074		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6075		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R6076		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R6077.78		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	2	
R6079		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R6080		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6081		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6082		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6083		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6084		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6085		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6086		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6087		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R6088		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R6089		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R6090		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R6091		ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R6095		ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R6144		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R6145		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R6201		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6202		ERJ8GEYJ2R2	M.RESISTOR CH 1/8W 2.2	1	
R6203		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R6204		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6205		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6206-08		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	3	
R6209		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6210		ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R6501		ERJ3GEYJ564	M.RESISTOR CH 1/16W 560K	1	
R6502		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6503		ERJ3GEYJ564	M.RESISTOR CH 1/16W 560K	1	
R6504		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6505		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R6506		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6507		ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R6550		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
RA301-03		EXBV4V102J	RESISTOR-RESISTOR	3	
RA6001		EXBV8V102J	RESISTOR-RESISTOR	1	
RA6002		EXBV8V473J	RESISTOR-RESISTOR	1	
RA6003		EXBV4V102J	RESISTOR-RESISTOR	1	
RA6004,05		EXBV8V102J	RESISTOR-RESISTOR	2	
T1001		ELL04T061R	TRANSFORMER	1	
T1002		VTP0357	TRANSFORMER	1	
T4001		EIQ6QB008T	TRANSFORMER	1	
TH701		VRE0083	M.RESISTOR CH 1/10W	1	
X301		VSX0564	CRYSTAL OSCILLATOR	1	
X701		EFOS1205E5	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X6001		VSX0654	CRYSTAL OSCILLATOR	1	
X6002		VSX0601	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VSC3871	H.A SHIELD COVER (BOTTOM)	1	
		VSC3855	POWER SHIELD COVER (TOP)	1	
		VSC3906	POWER SHIELD COVER (BOTT.)	1	
		VSC4138	CAMERA SHIELD COVER	1	
		VMG2278	CAMERA BARRIER	1	
	■	VEP28106A	E.V.F. C.B.A.		(RTL)
B1601		VJP3126B030	CONNECTOR (MALE) 30P	1	
C801		ECQB1C104JB	P.CAPACITOR CH 16V 0.1U	1	
C802-04		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	3	
C805		ECEA0JKE221	E.CAPACITOR 6.3V 220U	1	
C806		ECUX1C123KBV	C.CAPACITOR CH 16V 0.012U	1	
C807		ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	
C809		ECEV1CA470F	E.CAPACITOR 16V 47U	1	
C810		ECUM2A432JUM	C.CAPACITOR 100V 4300P	1	
C811		ECST1AD476Z	T.CAPACITOR 10V 47U	1	
C812		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C813		ECUM2J221KBM	C.CAPACITOR 630V 220P	1	
C814		ECEV1UA010	E.CAPACITOR CH 50V 1U	1	
C815		ECUM2H331KBM	C.CAPACITOR 500V 330P	1	
C816		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C831		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C861		ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C862		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C863		ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
C1603		ECEV1CA220	E.CAPACITOR 16V 22U	1	
D803		MA142WA	DIODE	1	
D1601		SFPB-72	DIODE	1	
D1602-04		MA8130M	DIODE	3	
IC801		AN2516S	IC	1	
J1601		VJJ0368	JACK	1	
J1602		VEK6424	JACK	1	
L801		ELJPA100KB	COIL	1	
L804		ELJFA680KB	COIL 68UH	1	
L805		ELJPA100KB	COIL	1	
L806		ELH5L222	COIL H	1	
L1601,02		VLP0134	COIL	2	
P801		VJP3499D004	CONNECTOR (MALE) 4P	1	
P803		VJP3125B003	CONNECTOR (MALE) 3P	1	
P804		VJP1242T	CONNECTOR (MALE) 2P	1	
P1602		VJP3125D002	CONNECTOR (MALE) 2P	1	
Q802		2SD968A-S	TRANSISTOR	1	
Q803,04		2SA1748	TRANSISTOR	2	
Q805,06		2SD2216	TRANSISTOR	2	
QR881		UN0212	TRANSISTOR-RESISTOR	1	
QR882		UN2130X	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R801		ERJ6ENF4422	M.RESISTOR CH 1/10W 2.2K	1	
R802		ERJ6GEYJ3R9	M.RESISTOR CH 1/10W 3.9	1	
R805		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R808		VRE0071E242	M.RESISTOR CH 1/10W 2.4K	1	
R809		ERJ3GEYJ564	M.RESISTOR CH 1/16W 560K	1	
R810		ERJ6GEYF104	M.RESISTOR CH 1/10W 100K	1	
R815		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R816,17		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	2	
R818		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R819,20		ERJ6GEYJ275	M.RESISTOR CH 1/10W 2.7M	2	
R821		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R823		ERJ3GEYJ8R2	M.RESISTOR CH 1/16W 8.2	1	
R829		ERJ6ENF4222	M.RESISTOR CH 1/10W 2.2K	1	
R833		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R834		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R835		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R840		ERJ8GEYJ685	M.RESISTOR CH 1/8W 6.8M	1	
R841,42		ERJ6GEYJ475	M.RESISTOR CH 1/10W 4.7M	2	
R843		ERJ3GEYJ564	M.RESISTOR CH 1/16W 560K	1	
R844		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R850		ERJ6ENF8201	M.RESISTOR	1	
R851		ERJ6ENF3901	M.RESISTOR	1	
R852		ERJ6GEYJ822	M.RESISTOR CH 1/10W 0.2K	1	
R853		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R854		ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R855		ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R861		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R862		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R863		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R864		ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R883		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R890		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R899		ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R1601		VSF0092	RESISTOR	1	
R1602		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R1606		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R1701		ERJ0GEY0R00	M.RESISTOR CH 1/8W 0	1	
SW892		ESD155236	SWITCH	1	
SW895		ESE122	SWITCH	1	
SW896		VSS0392	SWITCH	1	
T801		ETF08L20A	TRANSFORMER	1	
VR801		EVM7JSX30BE2	V.RESISTOR	1	
VR803		EVM7TSX00BV6	V.RESISTOR	1	
VR804		EVM7BSX30B26	V.RESISTOR	1	
Z1601		VL2330/1HF	LITHIUM BATTERY	1	
			MISCELLANEOUS		
		VEE9267	WIRE CABLE	1	
	■	VEP22140B	OCD FLEX.CARD C.B.A.		(RTL)
B291		VJS3500C012	CONNECTOR (FEMALE) 12P	1	
C292		ECST1VX2252	T.CAPACITOR 35V 2.2U	1	
C294		ECUM1E473ZFN	C.CAPACITOR 25V 0.047U	2	
C295		ECUM1E104ZFN	C.CAPACITOR 25V 0.1U	1	
D291		MA153	DIODE	1	
Q291		2SC2295	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R291		ERJ6GEYG560	M.RESISTOR CH 1/16W 56	1	
R292		ERJ6GEVF472	M.RESISTOR CH 1/16W 4.7K	1	
R293		ERJ6GEY0R00	M.RESISTOR CH 1/16W 0	2	
			MISCELLANEOUS		
		VJB22140	FLEX. CARD	1	
	■	VEK6690	LENS FLEX. CARD C.B.A.		(RTL)
			MISCELLANEOUS		
		ON1400-R	PHOTO SENSOR	1	
	■	VEP00V02A	FOCUS VR C.B.A.		(RTL)
VR501		EVJ4Y0FB4B15	V.RESISTOR	1	
			MISCELLANEOUS		
		VEE9111	WIRE CABLE	1	
	■	VEK7311	MIC C.B.A.		(RTL)
			MISCELLANEOUS		
		VEE9110	WIRE CABLE	1	
	■	VEP04457D	AV JACK C.B.A.		(RTL)
B1501		VJS3294C010	CONNECTOR (FEMALE) 10P	1	
L1503		VLP0153	COIL H	1	
L1504-06		VLQ0584	COIL	3	
			MISCELLANEOUS		
		VEJ1378	AV JACK PLATE	1	
		VMP4063	EARTH PLATE	1	
	■	VEP00V80A	S/S C.B.A.		(RTL)
S6702		ESE103119	SWITCH	1	
	■	VEP00V61A	IR SENSOR C.B.A.		(RTL)
C051		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C052		ECEA0JKS101	C.CAPACITOR 6.3V 100U	1	
C053		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
IC051		TA75S393F	IC	1	
IR051		PH310-1	IR RECEIVER UNIT	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P051		VJP3331B003	CONNECTOR (MALE) 3P	1	
Q051		2SD1030	TRANSISTOR	1	
R051		ERJ6GEY395	M.RESISTOR CH 1/10W 3.3M	1	
R054		ERJ6GEY113	M.RESISTOR CH 1/10W 11M	1	
R055		ERJ6GEY183	M.RESISTOR CH 1/10W 18M	1	
R056		ERJ6GEY563	M.RESISTOR CH 1/10W 56M	1	
			MISCELLANEOUS		
		VEE9254	WIRE CABLE	1	

INTERNAL REFERENCE CODES NOTE: This chart is only for internal reference. Do not order any parts according to these codes.	
P.C.B.	FILM CODE
AV JACK	HOKU00-04457
CAMERA MAIN	HOKU02-23233
EVF	HOKU00-28106
IR SENSOR	HOKU00-00V61
FOCUS VR	HOKU00-00V02
CCD FLEXIBLE CARD	HOKU00-22140
S/S & POWER SW	HOKU00-00V80

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